

ATTACHMENT PTA-XVI - VDOT ADEQUACY REPORT AND APPROVAL LETTER

In accordance with §10.1-1408.1.D.1 and 1408.4-.A-1 of the Code of Virginia and §9 VAC 20-81-460 of the *VSWMR*, an application for a new sanitary landfill shall include a written site-specific report approved by the Virginia Department of Transportation (VDOT), evaluating the adequacy of the transportation facilities that will be available to serve the landfill, including the impact of the landfill on local traffic volume, road congestion, and highway safety.

The Part A Application was originally submitted to DEQ on January 22, 2020. It was reviewed by DEQ and Technical Review No. 1 (TR 1) issued on April 8, 2021. TR 1 had four comments on the various road issues which are now irrelevant.

Responses to these comments were provided on October 1, 2021.

Subsequently, DEQ issued Technical Review No. 2 (TR 2) on June 16, 2022 with a supplement to TR 2 issued on October 25, 2022. No comments specific to this attachment were received.

On May 12, 2023, a draft TR 2 response addressing updates to the Part A documents was submitted by TRC to DEQ for review and comment. Comments were received from DEQ via email on June 29, 2023. No comments were received on this attachment.

Based on subsequent changes to the disposal area, access into the site for the initial phase of the landfill will not utilize the private access road off of Route 60. Therefore, none of the comments from TR 1 nor the responses are currently relevant. For this initial phase, access for vehicles entering the landfill will be via a commercial entrance off Pinegrove Road. Miller Lane will no longer be crossed, but a portion will still require relocation as approved by VDOT and the County. A new Traffic Impact Analysis (TIA) was conducted to evaluate potential impacts to traffic on Pinegrove Road and Route 60 based on the new entrance and a revised (reduced) volume of waste anticipated for the initial phase of the landfill. The new TIA is included in this attachment. Accordingly, a new VDOT letter regarding its review of the TIA and approval of the recommendations is also provided in this attachment.

With the proposed relocated Miller Lane, the initial disposal unit area will be 285 feet from a section of Miller Lane. Additionally, portions of the initial disposal unit may be within 300 feet of the existing Pinegrove Road. The property owned by Green Ridge for the Green Ridge Recycling and Disposal Facility has been zoned M2 (Industrial) and site development is addressed through a conditional use permit as approved by the Cumberland County Board of Supervisors. (Code of Ordinances - Chapter 74 Zoning, Article XV, Industrial District M-2). Green Ridge believes, therefore, that it is exempt from the 500-foot restriction per the regulation below.

VSWMR 9VAC20-81-120.C.1.e states as follows:

C. Restrictions (distances are to be measured in the horizontal plane).

1. No disposal unit or leachate storage unit shall be closer than:

.....

e. 1,000 feet from the nearest edge of the right-of-way of any interstate or primary highway or 500 feet from the nearest edge of the right-of-way of any other highway or city street, except the following:

(1) Units that are screened by natural objects, plantings, fences, or other means so as to minimize the visibility from the main-traveled way of the highway or city street, or otherwise removed from sight;

(2) Units that are located in areas that are zoned for industrial use under authority of state law or in unzoned industrial areas as determined by the Commonwealth Transportation Board; or

(3) Units that are not visible from the main-traveled way of the highway or city street.

With that said, Green Ridge is aware of its need to provide appropriate buffers to minimize impacts from its operations on residents traveling these roads. Buffer requirements and other restrictions (e.g., noise and light limits) have been identified in the Conditional Use Permit and must be upheld by Green Ridge.

This Attachment is submitted as part of the Final Part A Submission.

The following is a list of documents associated with this section:

- Traffic Impact Analysis – Green Ridge Recycling and Disposal Facility - Gorove Slade, dated 4/27/2023
- VDOT Traffic Adequacy Report – dated June 7, 2023

TRAFFIC IMPACT ANALYSIS

To: Wendy Karably, PMP
Cc: Stephany Johnson, CZA
Scott Frederick, P.E.
From: Carl Hultgren, P.E., PTOE
Date: April 27, 2023
Subject: **Green Ridge Recycling and Disposal Facility**

TRC Companies, Inc.
Cumberland County
VDOT
Gorove Slade



Introduction

Green Ridge Recycling and Disposal Facility, LLC is proposing to construct a recycling and disposal facility located in Clinton, Virginia, north of U.S. 60 (Anderson Highway). The facility is loosely bounded by Route 654 (Pinegrove Road) and Route 685 (Miller Lane). Currently, the facility operations will be primarily on the east side of Pinegrove Road. The proposed access plan includes relocating a portion of Miller Lane approximately 950 feet to the south along Pinegrove Road. The facility is also planning to build a new driveway on Pinegrove Road approximately 400 to 500 feet north of the relocated Miller Lane.

If approved, the facility is expected to be built and operational by 2027. The facility is expected to operate between 6:00 AM and 4:00 PM on weekdays, and from 6:00 AM to Noon on Saturdays.

The purpose of this analysis is to estimate the traffic impact that the proposed facility will have on the surrounding roadway network. The analysis is based on our Traffic Impact Analysis (TIA) scope meeting with the County and VDOT on April 13. Figure 1 shows the site location and study intersections.

Existing Conditions

Existing Roadway Network

Existing lane configurations were observed in the field by Gorove Slade. A description of the major roadways within the study area is presented below in Table 1, and the existing lane configuration is shown in Figure 2.

Table 1: Existing Roadway Network

Roadway	RTE #	VDOT Classification	Legal/Design Speed Limit (mph)	AADT (vpd)
Anderson Highway	60	Minor Arterial	55	5,000
Pinegrove Road (South of Miller Lane)	654	Local	55	300
Frenchs Store Road	654	Local	55	525
Miller Lane	685	Local	35	50

The annual average daily traffic (AADT) column reports the estimated 2023 daily two-way traffic volume on each roadway – assuming that the AM peak hour and PM peak hour each represent 10% of the daily traffic volume.

Note that there approximately 100 feet of offset between Pinegrove Road and Frenchs Store Road along U.S. 60. For the purpose of this analysis, it was assumed to be a single intersection.

Existing (2023) Traffic Volumes

The weekday AM peak hour (6:00 to 8:00 AM) and PM peak hour (3:00 to 5:00 PM) traffic volumes were conducted by Burns Services Inc. on April 18 at the following intersections:

- U.S. 60 at Pinegrove Road / Frenchs Store Road
- Pinegrove Road at Miller Lane

Figure 3 shows the 2023 traffic volumes at the study intersections.



Figure 1: Site Location and Study Intersections

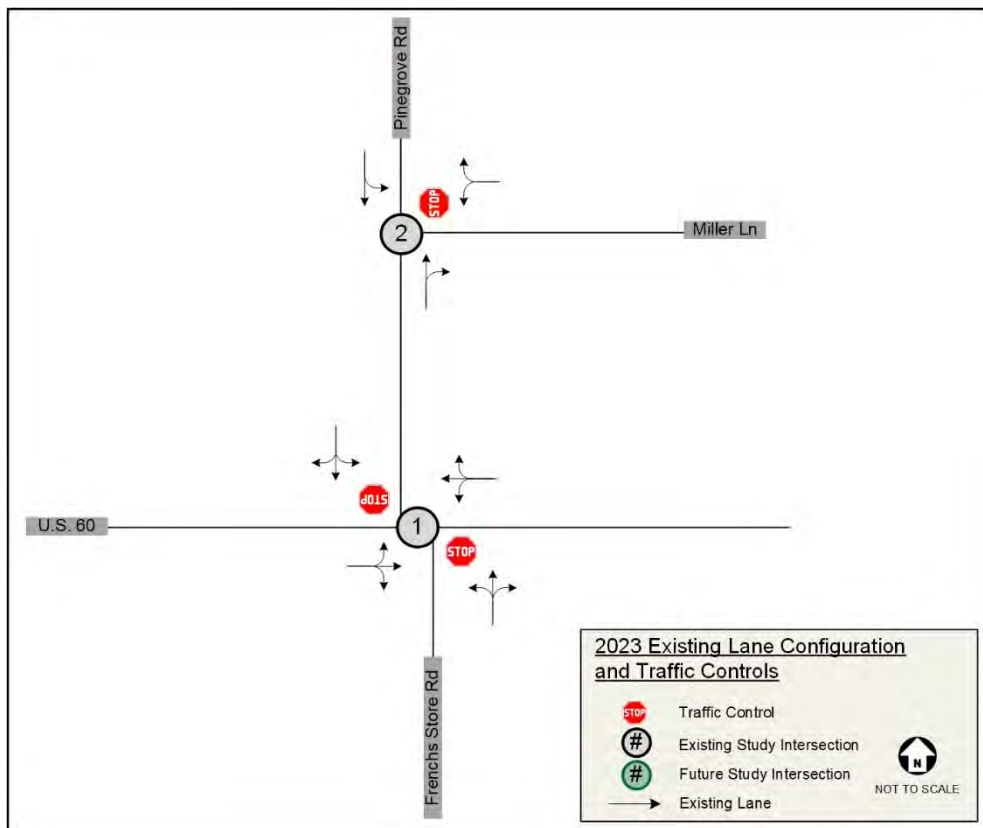


Figure 2: Existing Lane Configuration

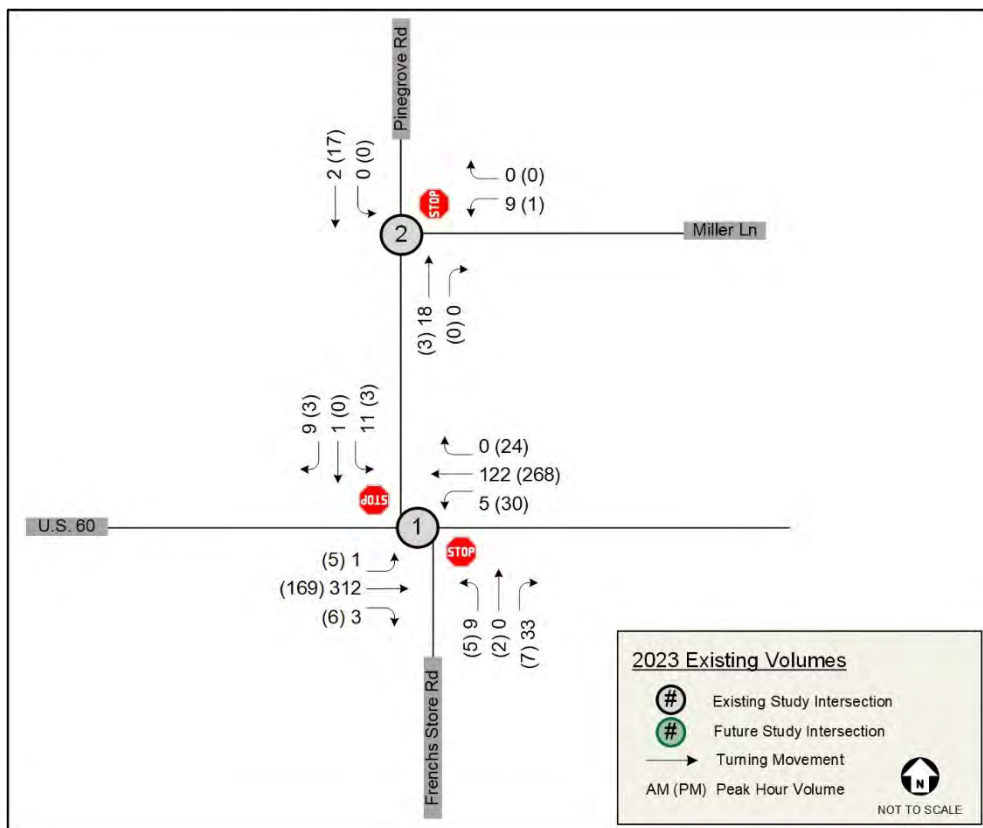


Figure 3: Existing (2023) Peak Hour Traffic Volumes

No-Build (2027) Conditions

Background Improvements

Based on the TIA scoping meeting, there are no planned roadway improvements at the study intersections. The proposed realignment of Miller Lane was assumed under Build conditions only.

Background Developments

Based on the TIA scoping meeting, there are no approved developments in the vicinity of the site that will have a significant impact on the study intersections.

Background Traffic Growth

An annual background growth rate of 1.0% for four years was applied to the existing traffic volumes to estimate the 2027 traffic volumes, which are shown in Figure 4.

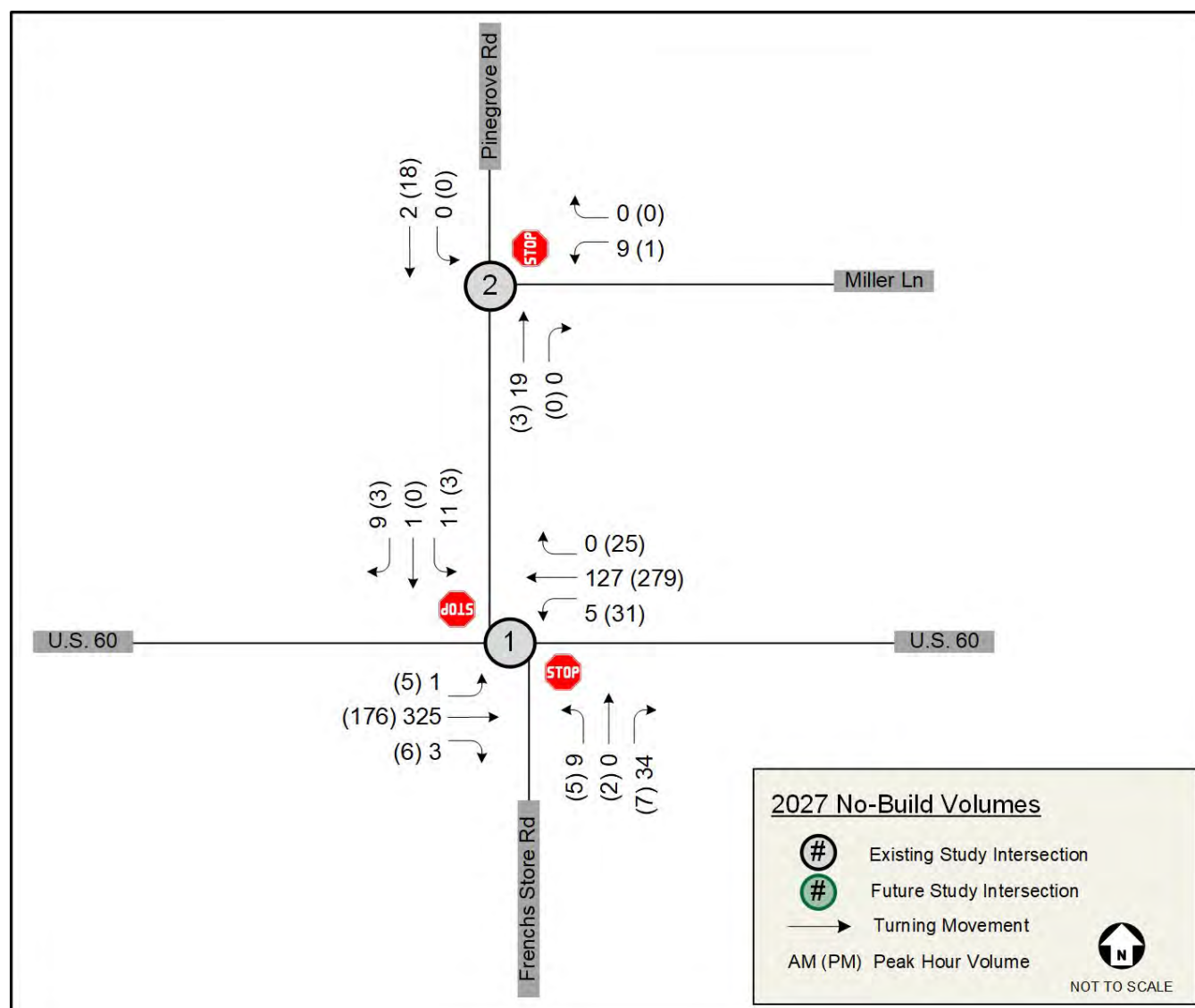


Figure 4: No-Build (2027) Peak Hour Volumes

Site Generated Trips

Table 2 shows the trip potential of the facility based on traffic projections provided by Green Ridge.

Table 2: ITE Trip Generation – Typical Weekday – 11th Edition

Vehicle Type	Amount	Average Weekday Daily Traffic (vpd)		AM Peak Hour		PM Peak hour	
		Enter	Exit	Enter	Exit	Enter	Exit
Regional Waste Hauling	1,500 tons per day	75	75	10	10	10	10
Leachate Hauling	31 trucks per day	31	31	4	4	4	4
Local Garbage Trucks	15 trucks per day	15	15	2	2	2	2
Construction Truck Traffic	66 trucks per day	66	66	9	9	9	9
Total Trucks		187	187	25	25	25	25
Local Residents	4 per hour	40	40	4	4	4	4
Employees	30 per day	45	45	30	5	5	30
Vendors	3 per day	3	3	0	0	0	0
Total Passenger Cars		88	88	34	9	9	34
Total Trips		275	275	59	34	34	59

Trip Generation Assumptions:

- Regional Waste Hauling – 1,500 tons per day and 20 tons per truck, so 75 trucks per day
- Leachate Hauling – 31 trucks per day
- Local Garbage Trucks – 15 trucks per day
- Construction Truck Traffic (6 months every other year) – 15 material deliveries per week (3 per day), 60 stone trucks per day, 3 concrete trucks per day
- All Truck Traffic – the facility is expected to operate between 6:00 AM and 4:00 PM every weekday – a period of 10 hours. If all of the trucks arrive / depart evenly throughout the day, then 10% of the trucks would arrive / depart during each hour. To be conservative, it was assumed that 12.5% of the trucks will arrive / depart during each peak hour.
- Employees – 15 during regular operation, 15 more during construction phase (6 months every other year), All drive their own car, and half leave and return once per day (lunch, appointments, etc.)

Site Trip Distribution

The site trip distribution was based on input from the County and VDOT, surrounding land uses, exiting traffic patterns, and engineering judgement. The following regional trip distribution was applied to the passenger cars:

- 55% to / from the east on U.S. 60
- 35% to / from the west on U.S. 60
- 5% to / from the north on Pinegrove Road
- 5% to / from the south on Frenchs Store Road

The following regional trip distribution was applied to the heavy vehicles:

- 75% to / from the east on U.S. 60
- 25% to / from the west on U.S. 60

Figure 5 shows the site trip distribution and assignment for passenger cars, and Figure 6 shows the site trip distribution and assignment for heavy vehicles.

Build (2027) Traffic Volumes

The build (2027) traffic volumes were estimated by adding the no-build (2027) volumes (Figure 4) and the site trips (Figure 5 and Figure 6). Figure 7 shows the build (2027) peak hour traffic volumes.

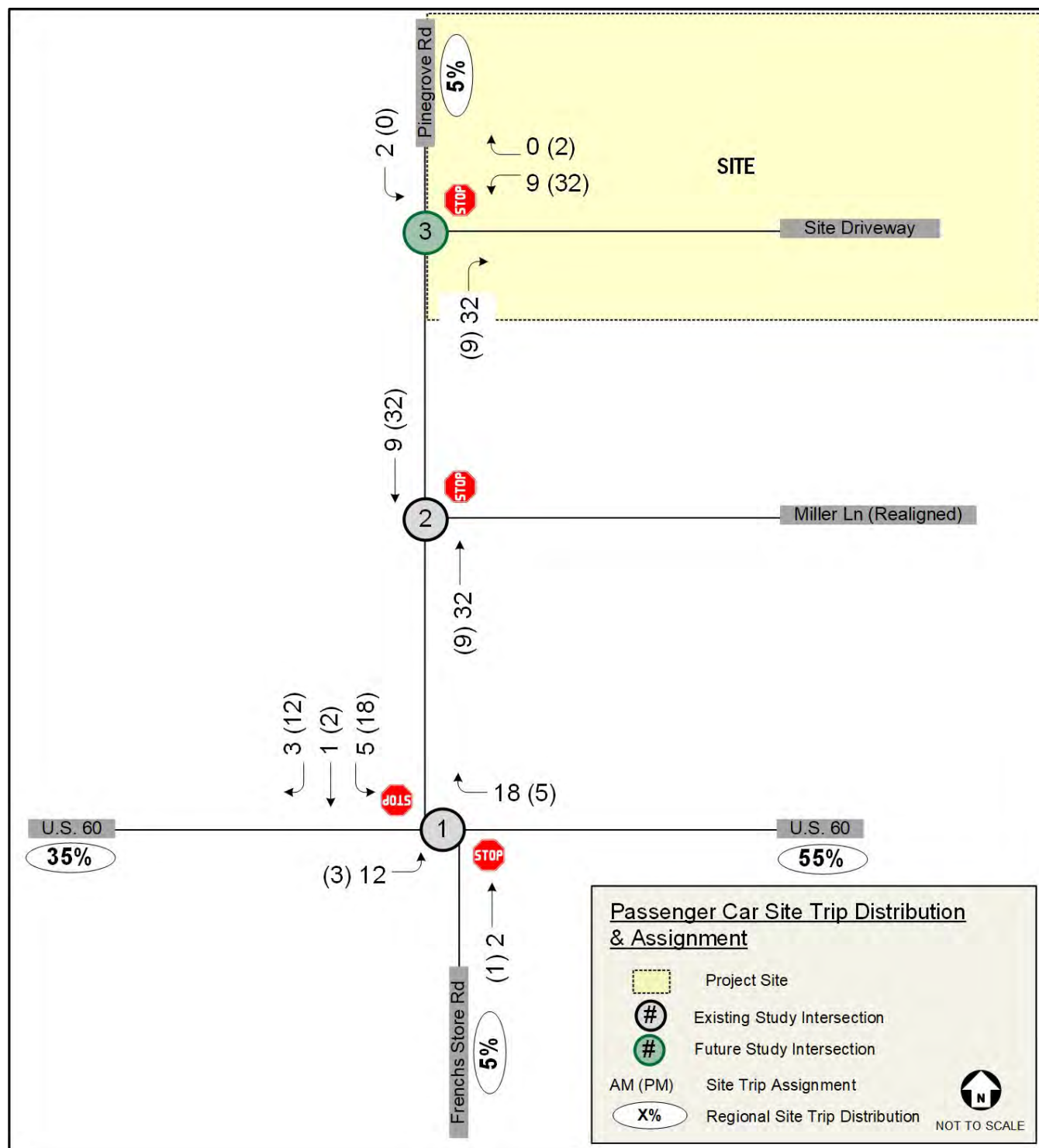


Figure 5: Passenger Car Site Trip Distribution and Assignment

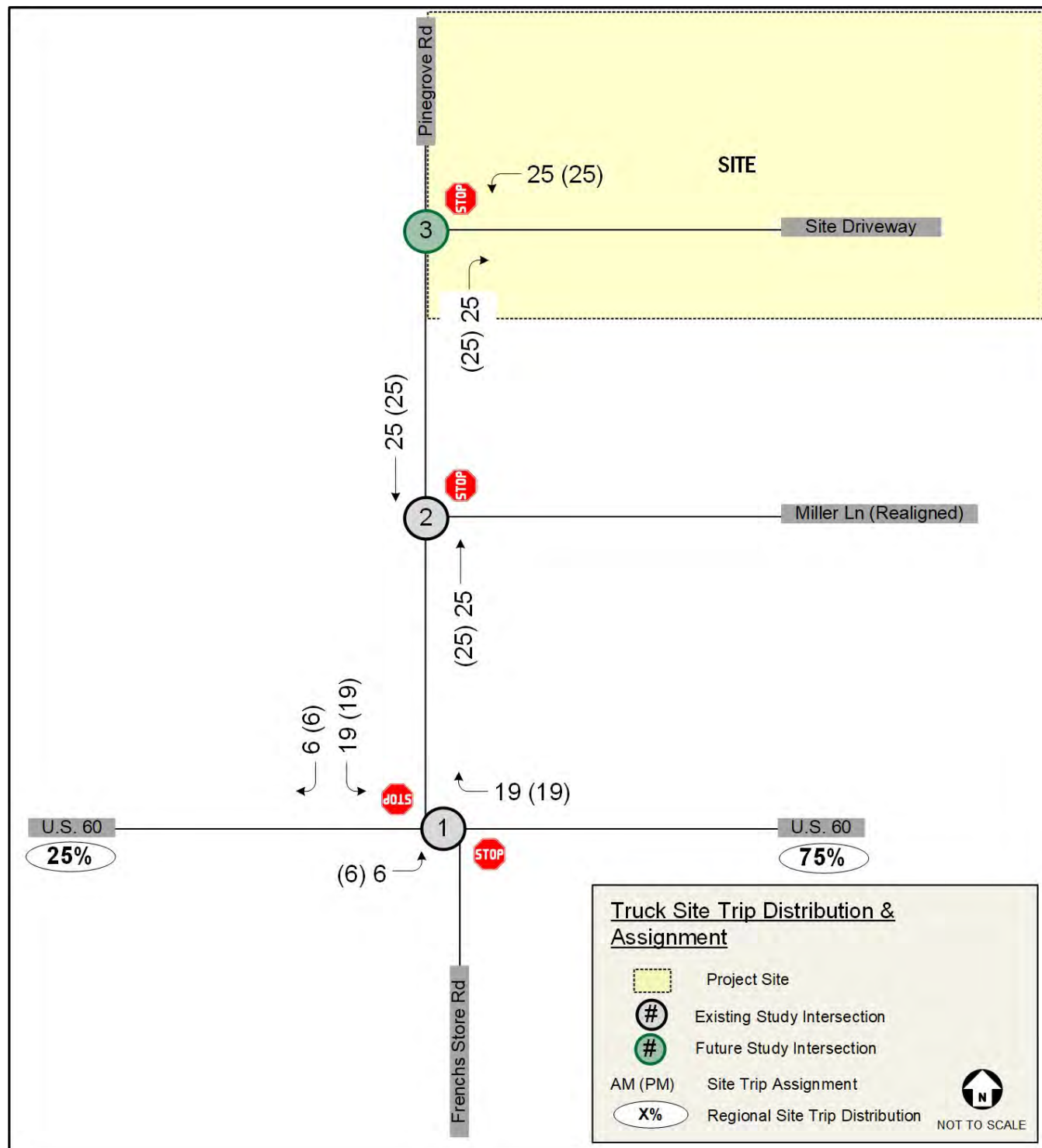


Figure 6: Truck Site Trip Distribution and Assignment

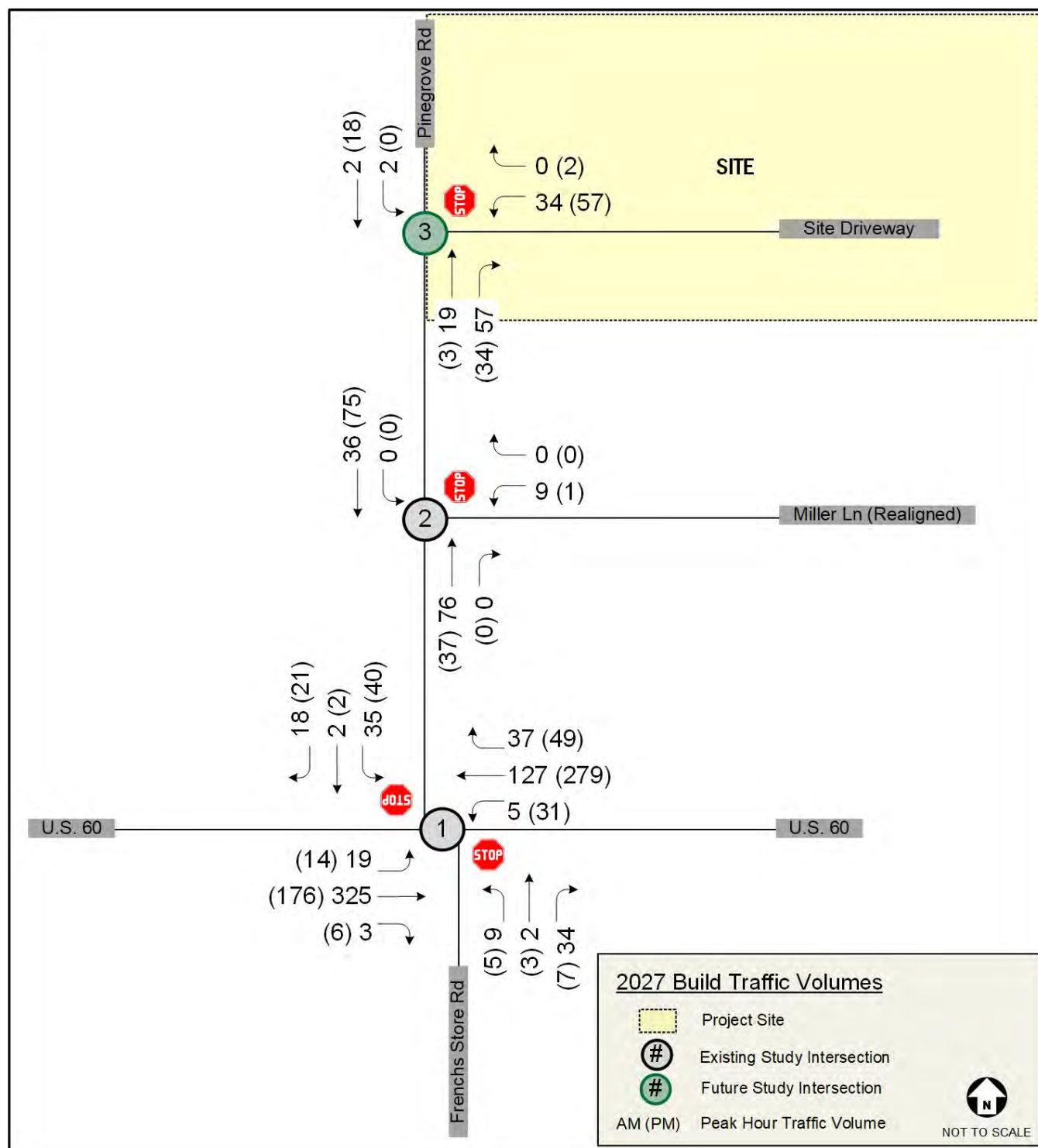


Figure 7: Build (2027) Peak Hour Traffic Volumes

Turn Lane Warrant Analysis

Tables 3 and 4 summarize the turn lane warrant evaluation at the study intersections, and the VDOT turn lane worksheets are included in the Appendix.

Table 3: Right-Turn Lane Warrant Summary (2-Lane) – Build 2027 Conditions

Study Scenario	Approach Volume	Right Turn Volume	Minimum Right Turn Taper Threshold	Minimum Right Turn Full Lane Threshold	Treatment
U.S. 60 at Pinegrove Rd / Frenchs Store Rd - Build 2027 AM - WBR	169	37	53	96	Not Warranted
U.S. 60 at Pinegrove Rd / Frenchs Store Rd - Build 2027 PM - WBR	359	49	34	71	Taper Required
Pinegrove Rd at Site Driveway - Build 2027 AM - NBR	76	57	62	108	Not Warranted
Pinegrove Rd at Site Driveway - Build 2027 PM - NBR	37	34	66	113	Not Warranted

Table 4: Left-Turn Lane Warrant Summary (2-Lane) – Build 2027 Conditions

Study Scenario	Opposing Vol. (VPH)	Advancing Vol. (VPH)	Left Turn Vol. (VPH)	Left Turn %	Treatment
U.S. 60 at Pinegrove Rd / Frenchs Store Rd - Build 2027 AM - EBL	169	347	19	5.48%	Not Warranted
U.S. 60 at Pinegrove Rd / Frenchs Store Rd - Build 2027 PM - EBL	359	196	14	7.14%	Not Warranted
Pinegrove Rd at Site Driveway - Build 2027 AM - SBL	76	4	2	50.00%	Not Warranted
Pinegrove Rd at Site Driveway - Build 2027 PM - SBL	37	18	0	0.00%	Not Warranted

Based on the results of the turn lane warrant analysis, a westbound right-turn taper is warranted at the intersection of U.S. 60 at Pinegrove Road / Frenchs Store Road in the PM peak hour only. No other turn lanes or tapers are warranted at any study intersections.

Traffic Capacity Analysis

Capacity analysis was performed at the study intersections during the weekday AM and PM peak hours under all analysis conditions. Synchro Version 11 was used to analyze the study intersections based on the Highway Capacity Manual (HCM) 6th methodology and includes level of service (LOS), delay, and queue length comparisons for the turning movements analyzed. Existing peak hour factors were used for all analysis conditions. If the peak hour factor was less than 0.92, then a minimum value of 0.92 was used for all future conditions, otherwise, the existing PHF was used. HCM 2000 methodology was used to generate capacity and queuing results if HCM 6th was not applicable at a study intersection. The Synchro outputs are included in the Appendix.

For unsignalized intersections, the average delays for the minor street movements are described as short delays (less than 25 seconds), moderate delays (between 25 and 50 seconds), and long delays (greater than 50 seconds). It is common for side street movements to experience long delays during the peak hours at intersections with major thoroughfares.

Table 4: Capacity Analysis Results – U.S. 60 at Pinegrove Road / Frenchs Store Road

Condition	Lane Group	Lane Storage (ft.)	AM Peak Hour			PM Peak Hour		
			LOS	Delay (sec)	Queue (ft.)	LOS	Delay (sec)	Queue (ft.)
Existing (2023) Traffic Conditions	EBL/T/R	-	A	7.5	0	A	8.0	0
	WBL/T/R	-	A	8.0	0	A	7.7	3
	NBL/T/R	-	B	11.2	5	B	11.8	3
	SBL/T/R	-	B	11.6	3	B	11.9	0
No-Build (2027) Traffic Conditions	EBL/T/R	-	A	7.5	0	A	8.0	0
	WBL/T/R	-	A	8.0	0	A	7.7	3
	NBL/T/R	-	B	11.2	5	B	11.9	3
	SBL/T/R	-	B	11.6	3	B	12.0	0
Build (2027) Traffic Conditions	EBL/T/R	-	A	8.0	3	A	8.6	0
	WBL/T/R	-	A	8.0	0	A	7.7	3
	NBL/T/R	-	B	11.7	8	B	12.7	3
	SBL/T/R	-	C	15.2	13	C	16.3	15

Capacity analysis indicates that the minor street left-turn movement currently operates with short delays during the AM and PM peak hours. Under no-build conditions, the minor street left-turn movement will continue to operate with short delays during the AM and PM peak hours.

Under build conditions, the minor street left-turn movement is expected to continue to operate with short delays during the AM and PM peak hours, with queue lengths of just one vehicle.

The following roadway improvement is warranted in the PM peak hour only:

- Westbound right-turn taper on U.S. 60

Table 5: Capacity Analysis Results – Pinegrove Road at Miller Lane

Condition	Lane Group	Lane Storage (ft.)	AM Peak Hour			PM Peak Hour		
			LOS	Delay (sec)	Queue (ft.)	LOS	Delay (sec)	Queue (ft.)
Existing (2023) Traffic Conditions	WBL/R	-	A	8.7	0	A	8.6	0
	NBT/R	-	-	-	-	-	-	-
	SBL/T	-	A	0.0	0	A	0.0	0
No-Build (2027) Traffic Conditions	WBL/R	-	A	8.6	0	A	8.6	0
	NBT/R	-	-	-	-	-	-	-
	SBL/T	-	A	0.0	0	A	0.0	0
Build (2027) Traffic Conditions	WBL/R	-	A	9.1	0	A	9.1	0
	NBT/R	-	-	-	-	-	-	-
	SBL/T	-	A	0.0	0	A	0.0	0

Capacity analysis indicates that the minor street left-turn movement currently operates with short delays during the AM and PM peak hours. Under no-build conditions, the minor street left-turn movement will continue to operate with short delays during the AM and PM peak hours.

Under build conditions, the minor street left-turn movement is expected to continue to operate with short delays during the AM and PM peak hours, with queue lengths of just one vehicle.

No improvements are warranted or recommended at this intersection at build-out of the proposed facility.

Table 6: Capacity Analysis Results – Pinegrove Road at Proposed Site Driveway

Condition	Lane Group	Lane Storage (ft.)	AM Peak Hour			PM Peak Hour		
			LOS	Delay (sec)	Queue (ft.)	LOS	Delay (sec)	Queue (ft.)
Build (2027) Traffic Conditions	WBL/R	-	A	9.7	3	A	9.4	5
	NBT/R	-	-	-	-	-	-	-
	SBL/T	-	A	7.4	0	A	0.0	0

Capacity analysis indicates that the minor street left-turn movement is expected to operate with short delays during the AM and PM peak hours, with queue lengths of just one vehicle.

No improvements are warranted or recommended at this intersection at build-out of the proposed facility.

Summary and Conclusions

Based on the results of the analysis, all study intersections are expected to operate with short delays (less than 25 seconds) and queuing at build-out of the proposed facility with the following improvement:

U.S. 60 at Pinegrove Road / Frenchs Store Road

- Construct a westbound right-turn taper on U.S. 60

All of the roadways in the study area are projected to operate well below their capacity:

- U.S. 60 has a capacity of approximately 15,000 vehicles per day, and is projected to carry approximately 5,800 vehicles per day at build-out of the proposed facility in 2027 (39% of the roadway capacity)
- Pinegrove Road has a capacity of approximately 10,000 vehicles per day, and is projected to carry approximately 1,250 vehicles per day at build-out of the proposed facility in 2027 (13% of the roadway capacity)
 - Although not part of the TIA, it is recommended that Green Ridge confirm the width and pavement structure of Pinegrove Road between U.S. 60 and the proposed site driveway, and improve the road as and if necessary to carry an ADT volume of at least 1,250 vehicles per day with 70% heavy vehicles
- Frenchs Store Road has a capacity of approximately 10,000 vehicles per day, and is projected to carry approximately 550 vehicles per day at build-out of the proposed facility in 2027 (6% of the roadway capacity)

APPENDIX

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APPENDIX A: TIA SCOPING DOCUMENT

PRE-SCOPE OF WORK MEETING FORM

Information on the Project Traffic Impact Analysis Base Assumptions

The applicant is responsible for entering the relevant information and submitting the form to VDOT and the locality no less than three (3) business days prior to the meeting. If a form is not received by this deadline, the scope of work meeting may be postponed.

Contact Information

Consultant Name: Gorove Slade - Carl Hultgren, P.E., PTOE
Tele: (804) 362-0578
E-mail: ch@goroveslade.com

Developer/Owner Name: TRC Companies - Wendy Karably, PMP
Tele: (804) 515-1385
E-mail: wkarably@trccompanies.com

Project Information

Project Name: Green Ridge Recycling and Disposal Facility
Locality/County: Cumberland County

Project Location:
(Attach regional and site specific location map)
See Figure 1

Submission Type
Comp Plan ☐ Rezoning ☐ Site Plan ☒ Subd Plat ☐

Project Description:
(Including details on the land use, acreage, phasing, access location, etc. Attach additional sheet if necessary)
The proposed facility is located north of U.S. 60 (Anderson Highway) on both sides of Pinegrove Road. Initially, major operations will all be east of Pinegrove Road. The access plan includes relocating Miller Lane to the south, and adding one new driveway on Pinegrove Road.

Proposed Use(s):
(Check all that apply; attach additional pages as necessary)
Residential ☐ Commercial ☐ Mixed Use ☐ Other ☒

Residential Uses(s)

Number of Units: See trip table

ITE LU Code(s): _____

Commercial Use(s)

ITE LU Code(s): _____

Square Ft or Other Variable: _____

Other Use(s)

ITE LU Code(s): _____

Independent Variable(s): _____

Total Peak Hour Trip Projection: Less than 100 ☒ 100 – 499 ☐ 500 – 999 ☐ 1,000 or more ☐

It is important for the applicant to provide sufficient information to county and VDOT staff so that questions regarding geographic scope, alternate methodology, or other issues can be answered at the scoping meeting.

Traffic Impact Analysis Assumptions			
Study Period	Existing Year: 2023	Build-out Year: 2027	Design Year: 2027
Study Area Boundaries (Attach map)	North: See Figure 1	South:	
	East:	West:	
External Factors That Could Affect Project (Planned road improvements, other nearby developments)	None		
Consistency With Comprehensive Plan (Land use, transportation plan)	The current zoning is M-1 with a CUP for the proposed use		
Available Traffic Data (Historical, forecasts)	Route 60 - 4,600 vpd in 2016 / 4,700 vpd in 2021 Pinegrove Road - 330 vpd in 2016 / 360 vpd in 2021		
Trip Distribution (Attach sketch)	Road Name: See Figure 1	Road Name:	
	Road Name:	Road Name:	
Annual Vehicle Trip Growth Rate:	1.0%	Peak Period for Study (check all that apply)	<input checked="" type="checkbox"/> AM <input checked="" type="checkbox"/> PM <input type="checkbox"/> SAT
		Peak Hour of the Generator	
Study Intersections and/or Road Segments (Attach additional sheets as necessary)	1.U.S. 60 at Pinegrove Road / Frenchs Store Road	6.	
	2.Pinegrove Road at Miller Lane	7.	
	3.Pinegrove Road at Site Driveway	8.	
	4.	9.	
	5.	10.	
Trip Adjustment Factors	Internal allowance: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Reduction: _____% trips		Pass-by allowance: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Reduction: _____% trips
Software Methodology	<input checked="" type="checkbox"/> Synchro <input type="checkbox"/> HCS (v.2000/+) <input type="checkbox"/> aaSIDRA <input type="checkbox"/> CORSIM <input checked="" type="checkbox"/> Other SimTraffic		
Traffic Signal Proposed or Affected (Analysis software to be used, progression speed, cycle length)	Synchro / SimTraffic 11 will be used to analyze LOS, delay, and queueing at the study intersections.		

It is important for the applicant to provide sufficient information to county and VDOT staff so that questions regarding geographic scope, alternate methodology, or other issues can be answered at the scoping meeting.

Improvement(s) Assumed or to be Considered	The need for turn lanes and other off-site improvements will be determined based on the results of the analysis.		
Background Traffic Studies Considered	None		
Plan Submission	<input type="checkbox"/> Master Development Plan (MDP) <input type="checkbox"/> Preliminary/Sketch Plan	<input type="checkbox"/> Generalized Development Plan (GDP) <input checked="" type="checkbox"/> Other Plan type (Final Site, Subd. Plan)	
Additional Issues to be Addressed	<input checked="" type="checkbox"/> Queuing analysis <input type="checkbox"/> Merge analysis <input type="checkbox"/> TDM Measures	<input type="checkbox"/> Actuation/Coordination <input type="checkbox"/> Bike/Ped Accommodations <input type="checkbox"/> Other _____	<input type="checkbox"/> Weaving analysis <input checked="" type="checkbox"/> Intersection(s)

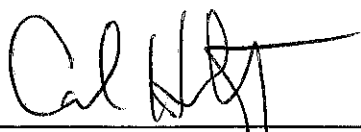
NOTES on ASSUMPTIONS:

The facility is expected to operate 6:00 am to 4:00 pm on weekdays, and 6:00 am to Noon on Saturdays

The traffic counts will be performed on a weekday between 6:00 and 8:00 AM and 3:00 to 5:00 PM

The TIA will include three analysis scenarios:

- Existing (2023) Conditions
- No-Build (2027) Conditions
- Build (2027) Conditions

SIGNED:  DATE: 4-13-23
Applicant or Consultant

PRINT NAME: Carl Hultgren
Applicant or Consultant

It is important for the applicant to provide sufficient information to county and VDOT staff so that questions regarding geographic scope, alternate methodology, or other issues can be answered at the scoping meeting.

**Green Ridge
Cumberland County, VA**

Table 1: Trip Generation – Typical Weekday – 11th Edition

Land Use (ITE Land Use Code)	Size	Average Daily Traffic (vpd)		AM Peak Hour (vph)		PM Peak Hour (vph)	
		Enter	Exit	Enter	Exit	Enter	Exit
Regional Waste Hauling	1,500 tons per day	75	75	10	10	10	10
Leachate Hauling	31 trucks per day	31	31	4	4	4	4
Local Garbage Trucks	15 trucks per day	15	15	2	2	2	2
Construction Truck Traffic	66 trucks per day	66	66	9	9	9	9
<i>Trucks</i>		187	187	25	25	25	25
Local Residents	4 per hour	40	40	4	4	4	4
Employees	30 per day	45	45	30	5	5	30
Vendors	3 per day	3	3	0	0	0	0
<i>Passenger Cars</i>		88	88	34	9	9	34
Total Trips		275	275	59	34	34	59

Assumptions:

Regional Waste Hauling:

- 1,500 tons per day, 20 tons per truck, Assume 12.5% arrive / depart during the AM and PM peak hours

Leachate Hauling:

- 31 trucks per day, Assume 12.5% arrive / depart during the AM and PM peak hours

Local Garbage Trucks:

- 15 trucks per day, Assume 12.5% arrive / depart during the AM and PM peak hours

Construction Truck Traffic (6 months every other year):

- 15 material deliveries per week (3 per day), 60 stone trucks per day, 3 concrete trucks per day, Assume 12.5% arrive / depart during the AM and PM peak hours







Employees:

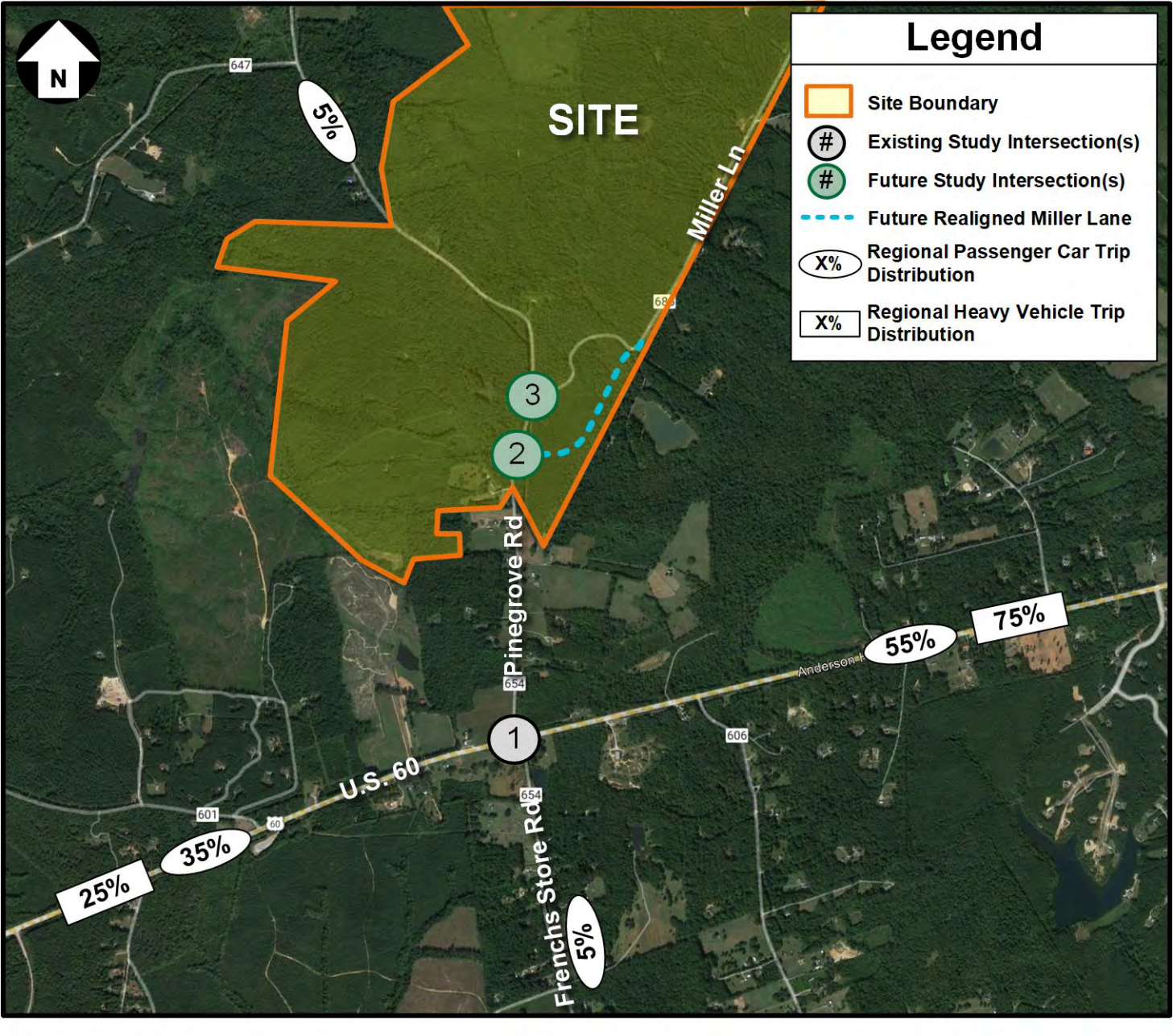
- 15 during regular operation, 15 more during construction phase (6 months every other year), All drive their own car, Half leave and return once per day (lunch, appointments, etc.)

April 10, 2023



Legend

-  Site Boundary
-  Existing Study Intersection(s)
-  Future Study Intersection(s)
-  Future Realigned Miller Lane
-  Regional Passenger Car Trip Distribution
-  Regional Heavy Vehicle Trip Distribution



APPENDIX B: TURNING MOVEMENT COUNT DATA



TRAFFIC DATA COLLECTION

File Name : Cumberland-Cumberland(Anderson Highway and Pine Grove Road)
 Site Code :
 Start Date : 4/18/2023
 Page No : 1

Groups Printed- Cars + - Trucks

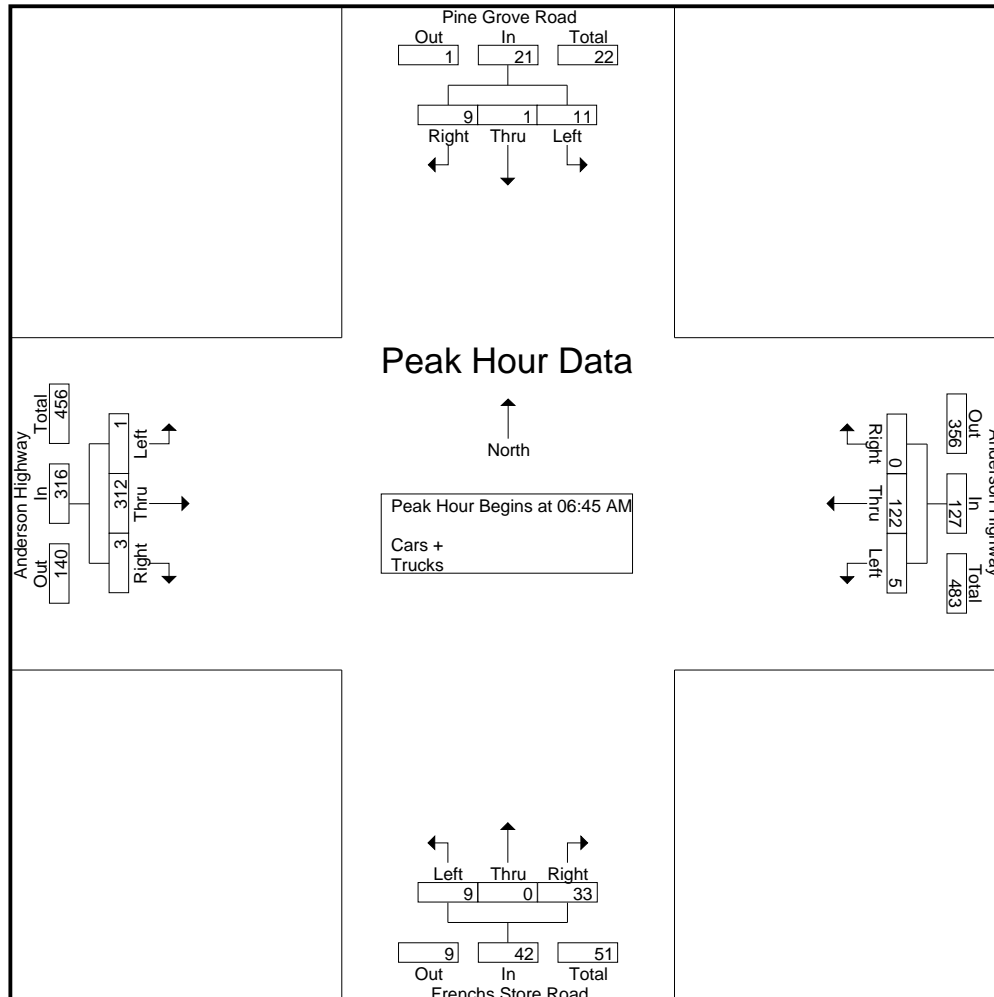
	Pine Grove Road Southbound				Anderson Highway Westbound				Frenchs Store Road Northbound				Anderson Highway Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
06:00 AM	0	0	5	5	0	12	0	12	4	0	0	4	0	53	1	54	75
06:15 AM	0	1	9	10	0	23	0	23	2	0	0	2	0	61	1	62	97
06:30 AM	0	0	10	10	1	22	0	23	6	0	1	7	3	57	0	60	100
06:45 AM	3	1	3	7	0	24	2	26	8	0	4	12	0	76	0	76	121
Total	3	2	27	32	1	81	2	84	20	0	5	25	3	247	2	252	393
07:00 AM	1	0	6	7	0	38	1	39	10	0	2	12	1	80	1	82	140
07:15 AM	2	0	2	4	0	31	0	31	9	0	2	11	1	78	0	79	125
07:30 AM	3	0	0	3	0	29	2	31	6	0	1	7	1	78	0	79	120
07:45 AM	1	0	5	6	2	26	0	28	3	0	1	4	3	61	0	64	102
Total	7	0	13	20	2	124	3	129	28	0	6	34	6	297	1	304	487
Grand Total	10	2	40	52	3	205	5	213	48	0	11	59	9	544	3	556	880
Apprch %	19.2	3.8	76.9		1.4	96.2	2.3		81.4	0	18.6		1.6	97.8	0.5		
Total %	1.1	0.2	4.5	5.9	0.3	23.3	0.6	24.2	5.5	0	1.2	6.7	1	61.8	0.3	63.2	
Cars +	10	2	39	51	3	184	5	192	47	0	11	58	8	521	3	532	833
% Cars +	100	100	97.5	98.1	100	89.8	100	90.1	97.9	0	100	98.3	88.9	95.8	100	95.7	94.7
Trucks	0	0	1	1	0	21	0	21	1	0	0	1	1	23	0	24	47
% Trucks	0	0	2.5	1.9	0	10.2	0	9.9	2.1	0	0	1.7	11.1	4.2	0	4.3	5.3



TRAFFIC DATA COLLECTION

File Name : Cumberland-Cumberland(Anderson Highway and Pine Grove Road)
 Site Code :
 Start Date : 4/18/2023
 Page No : 2

	Pine Grove Road Southbound				Anderson Highway Westbound				Frenchs Store Road Northbound				Anderson Highway Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 06:00 AM to 07:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 06:45 AM																	
06:45 AM	3	1	3	7	0	24	2	26	8	0	4	12	0	76	0	76	121
07:00 AM	1	0	6	7	0	38	1	39	10	0	2	12	1	80	1	82	140
07:15 AM	2	0	2	4	0	31	0	31	9	0	2	11	1	78	0	79	125
07:30 AM	3	0	0	3	0	29	2	31	6	0	1	7	1	78	0	79	120
Total Volume	9	1	11	21	0	122	5	127	33	0	9	42	3	312	1	316	506
% App. Total	42.9	4.8	52.4		0	96.1	3.9		78.6	0	21.4		0.9	98.7	0.3		
PHF	.750	.250	.458	.750	.000	.803	.625	.814	.825	.000	.563	.875	.750	.975	.250	.963	.904





TRAFFIC DATA COLLECTION

File Name : Cumberland-Cumberland(Anderson Highway and Pine Grove Road)
 Site Code :
 Start Date : 4/18/2023
 Page No : 1

Groups Printed- Cars + - Trucks

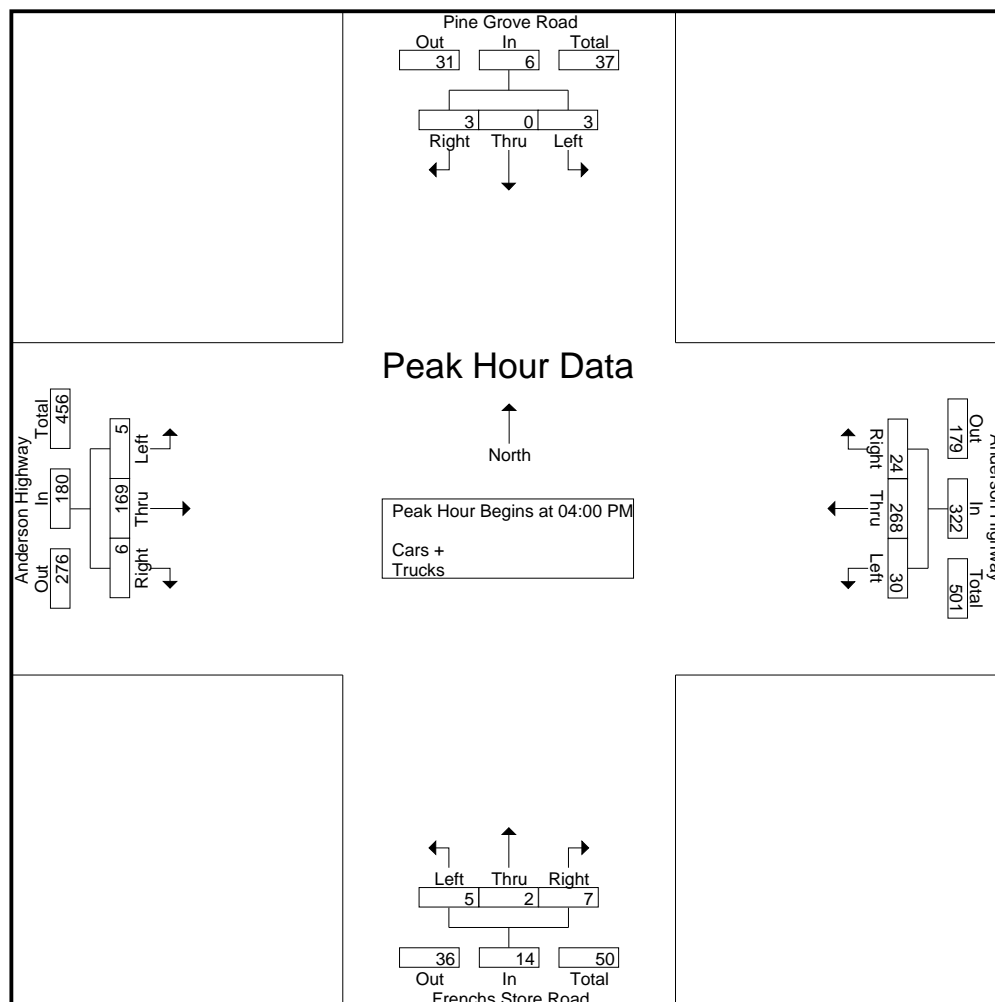
	Pine Grove Road Southbound				Anderson Highway Westbound				Frenchs Store Road Northbound				Anderson Highway Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
03:00 PM	0	0	4	4	0	54	1	55	1	0	0	1	0	37	1	38	98
03:15 PM	0	1	0	1	4	44	6	54	2	0	0	2	3	41	2	46	103
03:30 PM	0	0	0	0	3	55	4	62	2	0	0	2	0	52	3	55	119
03:45 PM	0	1	2	3	2	47	5	54	5	1	2	8	1	23	0	24	89
Total	0	2	6	8	9	200	16	225	10	1	2	13	4	153	6	163	409
04:00 PM	1	0	0	1	6	77	6	89	3	0	2	5	1	47	0	48	143
04:15 PM	1	0	1	2	7	70	4	81	2	1	1	4	1	45	0	46	133
04:30 PM	0	0	0	0	4	55	10	69	0	1	2	3	2	42	5	49	121
04:45 PM	1	0	2	3	7	66	10	83	2	0	0	2	2	35	0	37	125
Total	3	0	3	6	24	268	30	322	7	2	5	14	6	169	5	180	522
Grand Total	3	2	9	14	33	468	46	547	17	3	7	27	10	322	11	343	931
Apprch %	21.4	14.3	64.3		6	85.6	8.4		63	11.1	25.9		2.9	93.9	3.2		
Total %	0.3	0.2	1	1.5	3.5	50.3	4.9	58.8	1.8	0.3	0.8	2.9	1.1	34.6	1.2	36.8	
Cars +	3	2	9	14	33	448	44	525	17	3	6	26	9	305	10	324	889
% Cars +	100	100	100	100	100	95.7	95.7	96	100	100	85.7	96.3	90	94.7	90.9	94.5	95.5
Trucks	0	0	0	0	0	20	2	22	0	0	1	1	1	17	1	19	42
% Trucks	0	0	0	0	0	4.3	4.3	4	0	0	14.3	3.7	10	5.3	9.1	5.5	4.5



TRAFFIC DATA COLLECTION

File Name : Cumberland-Cumberland(Anderson Highway and Pine Grove Road)
 Site Code :
 Start Date : 4/18/2023
 Page No : 2

	Pine Grove Road Southbound				Anderson Highway Westbound				Frenchs Store Road Northbound				Anderson Highway Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 03:00 PM to 04:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	1	0	0	1	6	77	6	89	3	0	2	5	1	47	0	48	143
04:15 PM	1	0	1	2	7	70	4	81	2	1	1	4	1	45	0	46	133
04:30 PM	0	0	0	0	4	55	10	69	0	1	2	3	2	42	5	49	121
04:45 PM	1	0	2	3	7	66	10	83	2	0	0	2	2	35	0	37	125
Total Volume	3	0	3	6	24	268	30	322	7	2	5	14	6	169	5	180	522
% App. Total	50	0	50		7.5	83.2	9.3		50	14.3	35.7		3.3	93.9	2.8		
PHF	.750	.000	.375	.500	.857	.870	.750	.904	.583	.500	.625	.700	.750	.899	.250	.918	.913





TRAFFIC DATA COLLECTION

File Name : Cumberland-Cumberland (Pine Grove Road and Miller Lane)
 Site Code :
 Start Date : 4/18/2023
 Page No : 1

Groups Printed- Cars + - Trucks

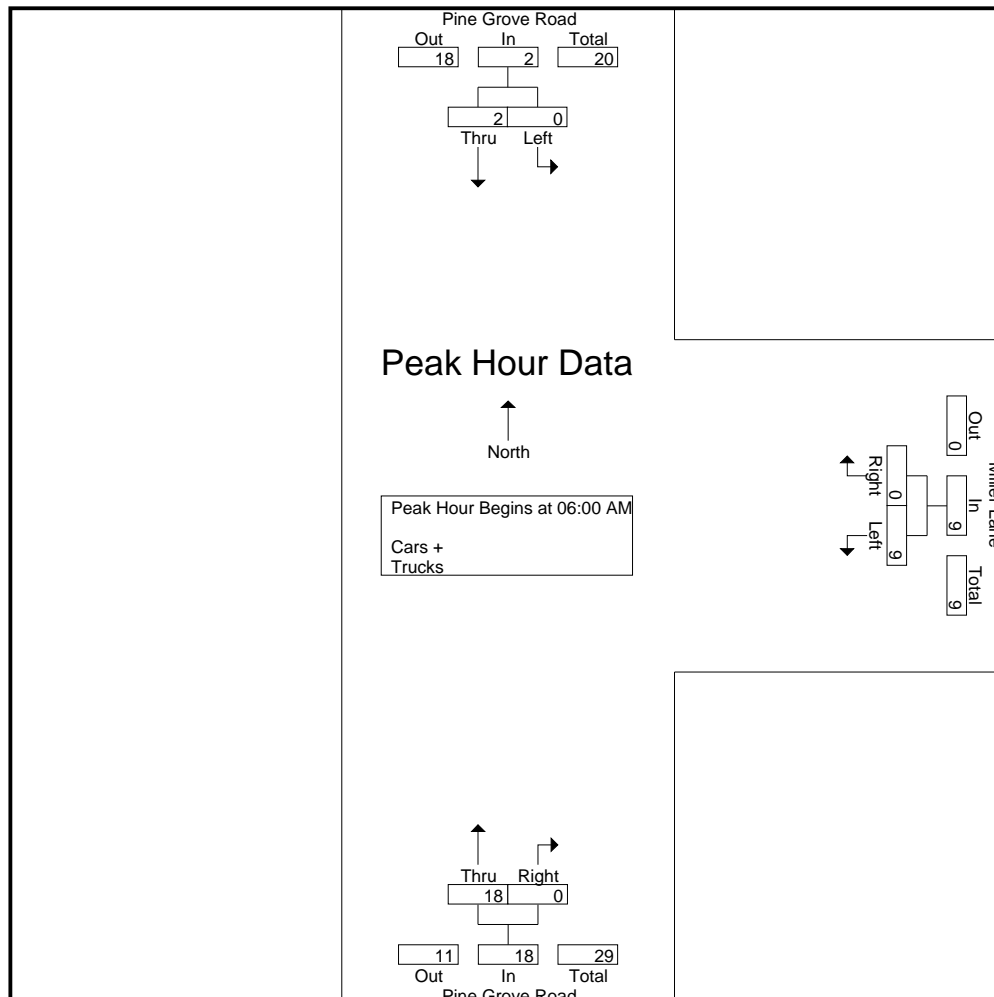
	Pine Grove Road Southbound			Miller Lane Westbound			Pine Grove Road Northbound			
Start Time	Thru	Left	App. Total	Right	Left	App. Total	Right	Thru	App. Total	Int. Total
06:00 AM	0	0	0	0	3	3	0	3	3	6
06:15 AM	1	0	1	0	2	2	0	6	6	9
06:30 AM	1	0	1	0	2	2	0	6	6	9
06:45 AM	0	0	0	0	2	2	0	3	3	5
Total	2	0	2	0	9	9	0	18	18	29
07:00 AM	0	0	0	0	1	1	0	4	4	5
07:15 AM	0	0	0	0	4	4	0	0	0	4
07:30 AM	0	0	0	0	0	0	0	1	1	1
07:45 AM	1	0	1	0	0	0	0	4	4	5
Total	1	0	1	0	5	5	0	9	9	15
Grand Total	3	0	3	0	14	14	0	27	27	44
Apprch %	100	0		0	100		0	100		
Total %	6.8	0	6.8	0	31.8	31.8	0	61.4	61.4	
Cars +	3	0	3	0	14	14	0	26	26	43
% Cars +	100	0	100	0	100	100	0	96.3	96.3	97.7
Trucks	0	0	0	0	0	0	0	1	1	1
% Trucks	0	0	0	0	0	0	0	3.7	3.7	2.3



TRAFFIC DATA COLLECTION

File Name : Cumberland-Cumberland (Pine Grove Road and Miller Lane)
 Site Code :
 Start Date : 4/18/2023
 Page No : 2

	Pine Grove Road Southbound			Miller Lane Westbound			Pine Grove Road Northbound			
Start Time	Thru	Left	App. Total	Right	Left	App. Total	Right	Thru	App. Total	Int. Total
Peak Hour Analysis From 06:00 AM to 07:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 06:00 AM										
06:00 AM	0	0	0	0	3	3	0	3	3	6
06:15 AM	1	0	1	0	2	2	0	6	6	9
06:30 AM	1	0	1	0	2	2	0	6	6	9
06:45 AM	0	0	0	0	2	2	0	3	3	5
Total Volume	2	0	2	0	9	9	0	18	18	29
% App. Total	100	0		0	100		0	100		
PHF	.500	.000	.500	.000	.750	.750	.000	.750	.750	.806





Site Code :

Page No : 1

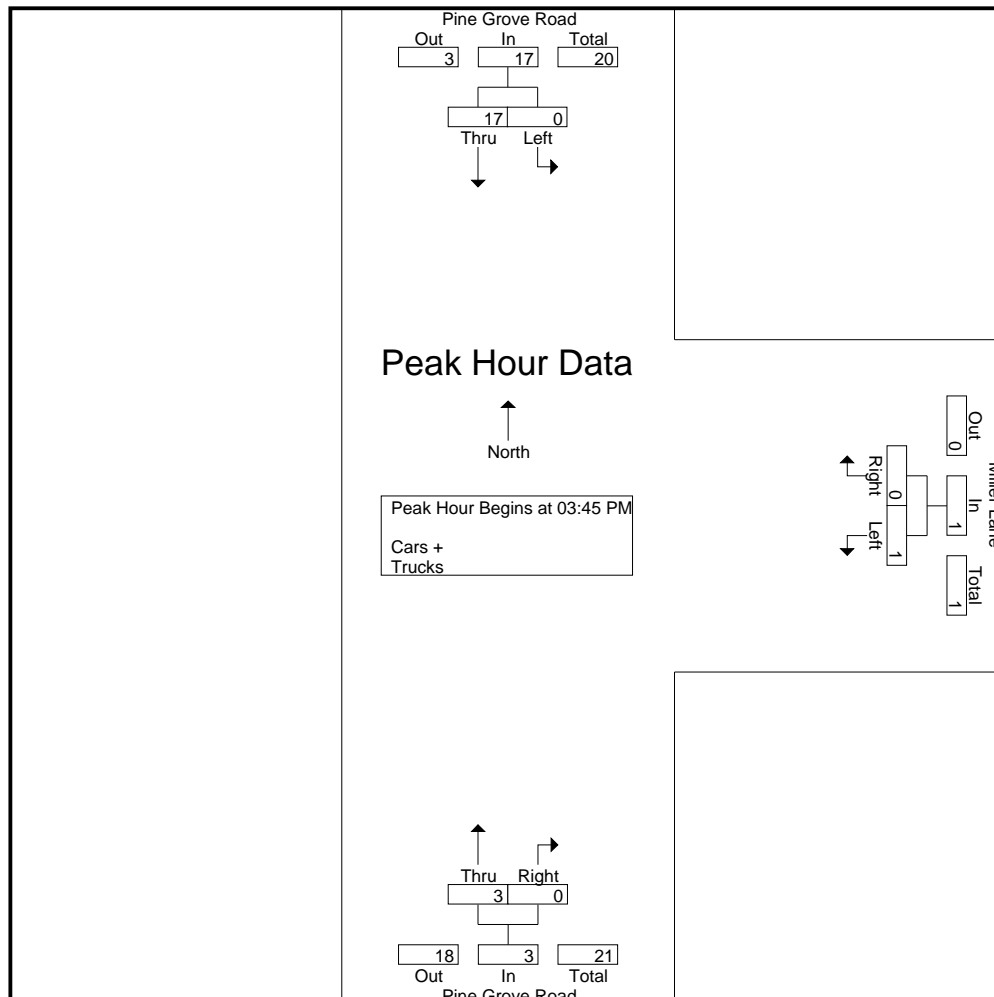
[illegible]



TRAFFIC DATA COLLECTION

File Name : Cumberland-Cumberland (Pine Grove Road and Miller Lane)
 Site Code :
 Start Date : 4/18/2023
 Page No : 2

	Pine Grove Road Southbound			Miller Lane Westbound			Pine Grove Road Northbound			
Start Time	Thru	Left	App. Total	Right	Left	App. Total	Right	Thru	App. Total	Int. Total
Peak Hour Analysis From 03:00 PM to 04:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 03:45 PM										
03:45 PM	3	0	3	0	0	0	0	2	2	5
04:00 PM	2	0	2	0	0	0	0	0	0	2
04:15 PM	5	0	5	0	0	0	0	1	1	6
04:30 PM	7	0	7	0	1	1	0	0	0	8
Total Volume	17	0	17	0	1	1	0	3	3	21
% App. Total	100	0		0	100		0	100		
PHF	.607	.000	.607	.000	.250	.250	.000	.375	.375	.656



APPENDIX C: SYNCHRO OUTPUT – EXISTING (2023) CONDITIONS

Green Ridge Recycling Center
1: Frenchs Store Rd/Pinegrove Rd & U.S. 60

Existing (2023) Conditions
Timing Plan: AM Peak Hour

Intersection

Int Delay, s/veh 1.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
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Lane Configurations

Traffic Vol, veh/h	1	312	3	5	122	0	9	0	33	11	1	9
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Future Vol, veh/h	1	312	3	5	122	0	9	0	33	11	1	9
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Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
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Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
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RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
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Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
----------------	---	---	---	---	---	---	---	---	---	---	---	---

Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
--------------------------	---	---	---	---	---	---	---	---	---	---	---	---

Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
----------	---	---	---	---	---	---	---	---	---	---	---	---

Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
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Heavy Vehicles, %	0	4	11	0	10	0	0	0	2	3	0	0
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Mvmt Flow	1	347	3	6	136	0	10	0	37	12	1	10
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Major/Minor	Major1	Major2	Minor1	Minor2
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Conflicting Flow All	136	0	0	350	0	0	505	499	349	517	500	136
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Stage 1	-	-	-	-	-	-	351	351	-	148	148	-
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Stage 2	-	-	-	-	-	-	154	148	-	369	352	-
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Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.22	7.13	6.5	6.2
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Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.13	5.5	-
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Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.13	5.5	-
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Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.318	3.527	4	3.3
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Pot Cap-1 Maneuver	1461	-	-	1220	-	-	481	476	694	467	476	918
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Stage 1	-	-	-	-	-	-	670	636	-	852	779	-
---------	---	---	---	---	---	---	-----	-----	---	-----	-----	---

Stage 2	-	-	-	-	-	-	853	779	-	649	635	-
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Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
--------------------	---	---	---	---	---	---	---	---	---	---	---	---

Mov Cap-1 Maneuver	1461	-	-	1220	-	-	473	473	694	440	473	918
--------------------	------	---	---	------	---	---	-----	-----	-----	-----	-----	-----

Mov Cap-2 Maneuver	-	-	-	-	-	-	473	473	-	440	473	-
--------------------	---	---	---	---	---	---	-----	-----	---	-----	-----	---

Stage 1	-	-	-	-	-	-	669	635	-	851	775	-
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Stage 2	-	-	-	-	-	-	838	775	-	614	634	-
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Approach	EB	WB	NB	SB
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HCM Control Delay, s	0	0.3	11.2	11.6
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HCM LOS			B	B
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Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
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Capacity (veh/h)	631	1461	-	-	1220	-	-	569
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HCM Lane V/C Ratio	0.074	0.001	-	-	0.005	-	-	0.041
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HCM Control Delay (s)	11.2	7.5	0	-	8	0	-	11.6
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HCM Lane LOS	B	A	A	-	A	A	-	B
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HCM 95th %tile Q(veh)	0.2	0	-	-	0	-	-	0.1
-----------------------	-----	---	---	---	---	---	---	-----

Green Ridge Recycling Center
2: Pinegrove Rd & Miller Ln

Existing (2023) Conditions
Timing Plan: AM Peak Hour

Intersection

Int Delay, s/veh 2.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	9	0	18	0	0	2
Future Vol, veh/h	9	0	18	0	0	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	81	81	81	81	81	81
Heavy Vehicles, %	0	0	4	0	0	0
Mvmt Flow	11	0	22	0	0	2

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	24	22	0
Stage 1	22	-	-
Stage 2	2	-	-
Critical Hdwy	6.4	6.2	-
Critical Hdwy Stg 1	5.4	-	-
Critical Hdwy Stg 2	5.4	-	-
Follow-up Hdwy	3.5	3.3	-
Pot Cap-1 Maneuver	997	1061	-
Stage 1	1006	-	-
Stage 2	1026	-	-
Platoon blocked, %		-	-
Mov Cap-1 Maneuver	997	1061	-
Mov Cap-2 Maneuver	997	-	-
Stage 1	1006	-	-
Stage 2	1026	-	-





Approach	WB	NB	SB
HCM Control Delay, s	8.7	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	997	1607
HCM Lane V/C Ratio	-	-	0.011	-
HCM Control Delay (s)	-	-	8.7	0
HCM Lane LOS	-	-	A	A
HCM 95th %tile Q(veh)	-	-	0	0

Green Ridge Recycling Center
1: Frenchs Store Rd/Pinegrove Rd & U.S. 60

Existing (2023) Conditions
Timing Plan: PM Peak Hour

Intersection

Int Delay, s/veh	1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	5	169	6	30	268	24	5	2	7	3	0	3
Future Vol, veh/h	5	169	6	30	268	24	5	2	7	3	0	3
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	9	5	10	4	4	0	14	0	0	0	0	0
Mvmt Flow	5	186	7	33	295	26	5	2	8	3	0	3

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	321	0	0	193	0	0	576	587	190	579	577	308
Stage 1	-	-	-	-	-	-	200	200	-	374	374	-
Stage 2	-	-	-	-	-	-	376	387	-	205	203	-
Critical Hdwy	4.19	-	-	4.14	-	-	7.24	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.24	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.24	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.281	-	-	2.236	-	-	3.626	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1200	-	-	1368	-	-	411	425	857	429	430	737
Stage 1	-	-	-	-	-	-	775	739	-	651	621	-
Stage 2	-	-	-	-	-	-	622	613	-	802	737	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1200	-	-	1368	-	-	399	411	857	412	415	737
Mov Cap-2 Maneuver	-	-	-	-	-	-	399	411	-	412	415	-
Stage 1	-	-	-	-	-	-	771	735	-	648	603	-
Stage 2	-	-	-	-	-	-	601	595	-	788	733	-




Approach	EB	WB	NB	SB
HCM Control Delay, s	0.2	0.7	11.8	11.9
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	548	1200	-	-	1368	-	-	529
HCM Lane V/C Ratio	0.028	0.005	-	-	0.024	-	-	0.012
HCM Control Delay (s)	11.8	8	0	-	7.7	0	-	11.9
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.1	0	-	-	0.1	-	-	0

Green Ridge Recycling Center
2: Pinegrove Rd & Miller Ln

Existing (2023) Conditions
Timing Plan: PM Peak Hour

Intersection

Int Delay, s/veh	0.4					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	1	0	3	0	0	17
Future Vol, veh/h	1	0	3	0	0	17
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	66	66	66	66	66	66
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	2	0	5	0	0	26

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	31	5	0
Stage 1	5	-	-
Stage 2	26	-	-
Critical Hdwy	6.4	6.2	-
Critical Hdwy Stg 1	5.4	-	-
Critical Hdwy Stg 2	5.4	-	-
Follow-up Hdwy	3.5	3.3	-
Pot Cap-1 Maneuver	988	1084	-
Stage 1	1023	-	-
Stage 2	1002	-	-
Platoon blocked, %		-	-
Mov Cap-1 Maneuver	988	1084	-
Mov Cap-2 Maneuver	988	-	-
Stage 1	1023	-	-
Stage 2	1002	-	-

Approach	WB	NB	SB
HCM Control Delay, s	8.6	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	988	1630
HCM Lane V/C Ratio	-	-	0.002	-
HCM Control Delay (s)	-	-	8.6	0
HCM Lane LOS	-	-	A	A
HCM 95th %tile Q(veh)	-	-	0	0

APPENDIX D: SYNCHRO OUTPUT – NO-BUILD (2027) CONDITIONS





Green Ridge Recycling Center
1: Frenchs Store Rd/Pinegrove Rd & U.S. 60

No-Build (2027) Conditions
Timing Plan: AM Peak Hour

Intersection

Int Delay, s/veh 1.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
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Lane Configurations												
Traffic Vol, veh/h	1	325	3	5	127	0	9	0	34	11	1	9
Future Vol, veh/h	1	325	3	5	127	0	9	0	34	11	1	9
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	4	11	0	10	0	0	0	2	3	0	0
Mvmt Flow	1	353	3	5	138	0	10	0	37	12	1	10

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	138	0	0	356	0	0	511	505	355	523	506	138
Stage 1	-	-	-	-	-	-	357	357	-	148	148	-
Stage 2	-	-	-	-	-	-	154	148	-	375	358	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.22	7.13	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.13	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.13	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.318	3.527	4	3.3
Pot Cap-1 Maneuver	1458	-	-	1214	-	-	476	473	689	463	472	916
Stage 1	-	-	-	-	-	-	665	632	-	852	779	-
Stage 2	-	-	-	-	-	-	853	779	-	644	631	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1458	-	-	1214	-	-	468	471	689	437	470	916
Mov Cap-2 Maneuver	-	-	-	-	-	-	468	471	-	437	470	-
Stage 1	-	-	-	-	-	-	664	631	-	851	776	-
Stage 2	-	-	-	-	-	-	839	776	-	609	630	-




Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0.3	11.2	11.6
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	627	1458	-	-	1214	-	-	566
HCM Lane V/C Ratio	0.075	0.001	-	-	0.004	-	-	0.04
HCM Control Delay (s)	11.2	7.5	0	-	8	0	-	11.6
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.2	0	-	-	0	-	-	0.1

Green Ridge Recycling Center
2: Pinegrove Rd & Miller Ln

No-Build (2027) Conditions
Timing Plan: AM Peak Hour

Intersection

Int Delay, s/veh	2.6					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	9	0	19	0	0	2
Future Vol, veh/h	9	0	19	0	0	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	4	0	0	0
Mvmt Flow	10	0	21	0	0	2

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	23	21	0
Stage 1	21	-	-
Stage 2	2	-	-
Critical Hdwy	6.4	6.2	-
Critical Hdwy Stg 1	5.4	-	-
Critical Hdwy Stg 2	5.4	-	-
Follow-up Hdwy	3.5	3.3	-
Pot Cap-1 Maneuver	998	1062	-
Stage 1	1007	-	-
Stage 2	1026	-	-
Platoon blocked, %		-	-
Mov Cap-1 Maneuver	998	1062	-
Mov Cap-2 Maneuver	998	-	-
Stage 1	1007	-	-
Stage 2	1026	-	-

Approach	WB	NB	SB
HCM Control Delay, s	8.6	0	0
HCM LOS	A		





Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	998	1608
HCM Lane V/C Ratio	-	-	0.01	-
HCM Control Delay (s)	-	-	8.6	0
HCM Lane LOS	-	-	A	A
HCM 95th %tile Q(veh)	-	-	0	0

Green Ridge Recycling Center
1: Frenchs Store Rd/Pinegrove Rd & U.S. 60

No-Build (2027) Conditions
Timing Plan: PM Peak Hour

Intersection

Int Delay, s/veh 0.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	5	176	6	31	279	25	5	2	7	3	0	3
Future Vol, veh/h	5	176	6	31	279	25	5	2	7	3	0	3
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	9	5	10	4	4	0	14	0	0	0	0	0
Mvmt Flow	5	191	7	34	303	27	5	2	8	3	0	3

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	330	0	0	198	0	0	591	603	195	595	593	317
Stage 1	-	-	-	-	-	-	205	205	-	385	385	-
Stage 2	-	-	-	-	-	-	386	398	-	210	208	-
Critical Hdwy	4.19	-	-	4.14	-	-	7.24	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.24	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.24	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.281	-	-	2.236	-	-	3.626	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1191	-	-	1363	-	-	401	416	851	419	421	728
Stage 1	-	-	-	-	-	-	770	736	-	642	614	-
Stage 2	-	-	-	-	-	-	614	606	-	797	734	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1191	-	-	1363	-	-	388	401	851	402	406	728
Mov Cap-2 Maneuver	-	-	-	-	-	-	388	401	-	402	406	-
Stage 1	-	-	-	-	-	-	766	732	-	639	595	-
Stage 2	-	-	-	-	-	-	592	587	-	784	730	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.2	0.7	11.9	12
HCM LOS			B	B




Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	536	1191	-	-	1363	-	-	518
HCM Lane V/C Ratio	0.028	0.005	-	-	0.025	-	-	0.013
HCM Control Delay (s)	11.9	8	0	-	7.7	0	-	12
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.1	0	-	-	0.1	-	-	0

Green Ridge Recycling Center
2: Pinegrove Rd & Miller Ln

No-Build (2027) Conditions

Timing Plan: PM Peak Hour

Intersection

Int Delay, s/veh	0.4					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	1	0	3	0	0	18
Future Vol, veh/h	1	0	3	0	0	18
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	1	0	3	0	0	20

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	23	3	0
Stage 1	3	-	-
Stage 2	20	-	-
Critical Hdwy	6.4	6.2	-
Critical Hdwy Stg 1	5.4	-	-
Critical Hdwy Stg 2	5.4	-	-
Follow-up Hdwy	3.5	3.3	-
Pot Cap-1 Maneuver	998	1087	-
Stage 1	1025	-	-
Stage 2	1008	-	-
Platoon blocked, %		-	-
Mov Cap-1 Maneuver	998	1087	-
Mov Cap-2 Maneuver	998	-	-
Stage 1	1025	-	-
Stage 2	1008	-	-

Approach	WB	NB	SB
HCM Control Delay, s	8.6	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	998	1632
HCM Lane V/C Ratio	-	-	0.001	-
HCM Control Delay (s)	-	-	8.6	0
HCM Lane LOS	-	-	A	A
HCM 95th %tile Q(veh)	-	-	0	0

APPENDIX E: SYNCHRO OUTPUT – BUILD (2027) CONDITIONS





Green Ridge Recycling Center
1: Frenchs Store Rd/Pinegrove Rd & U.S. 60

Build (2027) Conditions
Timing Plan: AM Peak Hour

Intersection

Int Delay, s/veh 2.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
----------	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

Lane Configurations												
Traffic Vol, veh/h	19	325	3	5	127	37	9	2	34	35	2	18
Future Vol, veh/h	19	325	3	5	127	37	9	2	34	35	2	18
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	32	4	0	0	9	51	0	0	3	54	0	33
Mvmt Flow	21	353	3	5	138	40	10	2	37	38	2	20

Major/Minor	Major1		Major2		Minor1		Minor2					
Conflicting Flow All	178	0	0	356	0	0	576	585	355	584	566	158
Stage 1	-	-	-	-	-	-	397	397	-	168	168	-
Stage 2	-	-	-	-	-	-	179	188	-	416	398	-
Critical Hdwy	4.42	-	-	4.1	-	-	7.1	6.5	6.23	7.64	6.5	6.53
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.64	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.64	5.5	-
Follow-up Hdwy	2.488	-	-	2.2	-	-	3.5	4	3.327	3.986	4	3.597
Pot Cap-1 Maneuver	1236	-	-	1214	-	-	431	426	687	355	436	812
Stage 1	-	-	-	-	-	-	633	607	-	726	763	-
Stage 2	-	-	-	-	-	-	827	748	-	523	606	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1236	-	-	1214	-	-	411	415	687	328	425	812
Mov Cap-2 Maneuver	-	-	-	-	-	-	411	415	-	328	425	-
Stage 1	-	-	-	-	-	-	620	594	-	711	759	-
Stage 2	-	-	-	-	-	-	801	744	-	483	593	-




Approach	EB	WB	NB	SB
HCM Control Delay, s	0.4	0.2	11.7	15.2
HCM LOS			B	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	590	1236	-	-	1214	-	-	412
HCM Lane V/C Ratio	0.083	0.017	-	-	0.004	-	-	0.145
HCM Control Delay (s)	11.7	8	0	-	8	0	-	15.2
HCM Lane LOS	B	A	A	-	A	A	-	C
HCM 95th %tile Q(veh)	0.3	0.1	-	-	0	-	-	0.5

Green Ridge Recycling Center
2: Pinegrove Rd & Miller Ln (Realigned)

Build (2027) Conditions
Timing Plan: AM Peak Hour

Intersection

Int Delay, s/veh	0.7					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	9	0	76	0	0	36
Future Vol, veh/h	9	0	76	0	0	36
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	34	0	0	69
Mvmt Flow	10	0	83	0	0	39

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	122	83	0	0	83
Stage 1	83	-	-	-	-
Stage 2	39	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1
Critical Hdwy Stg 1	5.4	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2
Pot Cap-1 Maneuver	878	982	-	-	1527
Stage 1	945	-	-	-	-
Stage 2	989	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	878	982	-	-	1527
Mov Cap-2 Maneuver	878	-	-	-	-
Stage 1	945	-	-	-	-
Stage 2	989	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.1	0	0
HCM LOS	A		




Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	878	1527
HCM Lane V/C Ratio	-	-	0.011	-
HCM Control Delay (s)	-	-	9.1	0
HCM Lane LOS	-	-	A	A
HCM 95th %tile Q(veh)	-	-	0	0

Green Ridge Recycling Center

3: Pinegrove Rd & Site Driveway

Build (2027) Conditions
Timing Plan: AM Peak Hour

Intersection

Int Delay, s/veh	3					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	34	0	19	57	2	2
Future Vol, veh/h	34	0	19	57	2	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	74	0	0	44	0	0
Mvmt Flow	37	0	21	62	2	2

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	58	52	0	0	83
Stage 1	52	-	-	-	-
Stage 2	6	-	-	-	-
Critical Hdwy	7.14	6.2	-	-	4.1
Critical Hdwy Stg 1	6.14	-	-	-	-
Critical Hdwy Stg 2	6.14	-	-	-	-
Follow-up Hdwy	4.166	3.3	-	-	2.2
Pot Cap-1 Maneuver	796	1021	-	-	1527
Stage 1	815	-	-	-	-
Stage 2	858	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	795	1021	-	-	1527
Mov Cap-2 Maneuver	795	-	-	-	-
Stage 1	815	-	-	-	-
Stage 2	857	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.7	0	3.7
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	795	1527
HCM Lane V/C Ratio	-	-	0.046	0.001
HCM Control Delay (s)	-	-	9.7	7.4
HCM Lane LOS	-	-	A	A
HCM 95th %tile Q(veh)	-	-	0.1	0





Green Ridge Recycling Center
1: Frenchs Store Rd/Pinegrove Rd & U.S. 60

Build (2027) Conditions
Timing Plan: PM Peak Hour

Intersection

Int Delay, s/veh 2.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
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Lane Configurations												
Traffic Vol, veh/h	14	176	6	31	279	49	5	3	7	40	2	21
Future Vol, veh/h	14	176	6	31	279	49	5	3	7	40	2	21
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	43	5	17	3	4	39	20	0	0	48	0	29
Mvmt Flow	15	191	7	34	303	53	5	3	8	43	2	23

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	356	0	0	198	0	0	635	649	195	628	626	330
Stage 1	-	-	-	-	-	-	225	225	-	398	398	-
Stage 2	-	-	-	-	-	-	410	424	-	230	228	-
Critical Hdwy	4.53	-	-	4.13	-	-	7.3	6.5	6.2	7.58	6.5	6.49
Critical Hdwy Stg 1	-	-	-	-	-	-	6.3	5.5	-	6.58	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.3	5.5	-	6.58	5.5	-
Follow-up Hdwy	2.587	-	-	2.227	-	-	3.68	4	3.3	3.932	4	3.561
Pot Cap-1 Maneuver	1008	-	-	1369	-	-	367	391	851	337	403	654
Stage 1	-	-	-	-	-	-	739	721	-	545	606	-
Stage 2	-	-	-	-	-	-	584	590	-	680	719	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1008	-	-	1369	-	-	340	373	851	320	384	654
Mov Cap-2 Maneuver	-	-	-	-	-	-	340	373	-	320	384	-
Stage 1	-	-	-	-	-	-	726	709	-	536	587	-
Stage 2	-	-	-	-	-	-	544	572	-	659	707	-




Approach	EB		WB		NB		SB
HCM Control Delay, s	0.6		0.7		12.7		16.3
HCM LOS					B		C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	484	1008	-	-	1369	-	-	388
HCM Lane V/C Ratio	0.034	0.015	-	-	0.025	-	-	0.176
HCM Control Delay (s)	12.7	8.6	0	-	7.7	0	-	16.3
HCM Lane LOS	B	A	A	-	A	A	-	C
HCM 95th %tile Q(veh)	0.1	0	-	-	0.1	-	-	0.6

Green Ridge Recycling Center
2: Pinegrove Rd & Miller Ln (Realigned)

Build (2027) Conditions
Timing Plan: PM Peak Hour

Intersection

Int Delay, s/veh	0.1					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	1	0	37	0	0	75
Future Vol, veh/h	1	0	37	0	0	75
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	68	0	0	33
Mvmt Flow	1	0	40	0	0	82

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	122	40	0	0	40
Stage 1	40	-	-	-	-
Stage 2	82	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1
Critical Hdwy Stg 1	5.4	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2
Pot Cap-1 Maneuver	878	1037	-	-	1583
Stage 1	988	-	-	-	-
Stage 2	946	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	878	1037	-	-	1583
Mov Cap-2 Maneuver	878	-	-	-	-
Stage 1	988	-	-	-	-
Stage 2	946	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.1	0	0
HCM LOS	A		




Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	878	1583
HCM Lane V/C Ratio	-	-	0.001	-
HCM Control Delay (s)	-	-	9.1	0
HCM Lane LOS	-	-	A	A
HCM 95th %tile Q(veh)	-	-	0	0

Green Ridge Recycling Center
3: Pinegrove Rd & Site Driveway

Build (2027) Conditions
Timing Plan: PM Peak Hour

Intersection

Int Delay, s/veh 4.9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	57	2	3	34	0	18
Future Vol, veh/h	57	2	3	34	0	18
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	44	0	0	74	0	0
Mvmt Flow	62	2	3	37	0	20

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	42	22	0
Stage 1	22	-	-
Stage 2	20	-	-
Critical Hdwy	6.84	6.2	-
Critical Hdwy Stg 1	5.84	-	-
Critical Hdwy Stg 2	5.84	-	-
Follow-up Hdwy	3.896	3.3	-
Pot Cap-1 Maneuver	873	1061	-
Stage 1	902	-	-
Stage 2	904	-	-
Platoon blocked, %		-	-
Mov Cap-1 Maneuver	873	1061	-
Mov Cap-2 Maneuver	873	-	-
Stage 1	902	-	-
Stage 2	904	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.4	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	878	1583
HCM Lane V/C Ratio	-	-	0.073	-
HCM Control Delay (s)	-	-	9.4	0
HCM Lane LOS	-	-	A	A
HCM 95th %tile Q(veh)	-	-	0.2	0

APPENDIX F: VDOT TURN LANE WARRANT ANALYSIS

General Project Information

Enter a value for all input cells

Project Name: Green Ridge - US 60 at Pinegrove Road / Frenchs Store

County: Cumberland

Reviewer: Build 2027, AM Peak Hour

Date: 4/28/2023

Adjacent Roadway Data

Adjacent Road Name: U.S. 60

Number of Lanes: 2

Posted Speed: 55 mph *

Classification: Minor Rural Arterial

AADT: N/A VPD D: N/A k: N/A enter N/A if factors are unknown

*Use Design Speed if available

Trip Generation

Generated Trips: 550 VPD

% Trucks in Entrance: 12 %

Right In: 37 VPH

Advancing Volume: 347 VPH

Left In: 19 VPH 5%

Opposing Volume: 169 VPH**

**Also used as Approaching Volume for Rt. Turns

Entrance Criteria

Entrance is a Standard Commercial Entrance

Entrance Type: Unsignalized Intersection/Crossover

Minimum Spacing: 1050 ft

SDL: 610 ft

SDR: 610 ft

Left Turn Lane Warrant: Advancing Volume \geq 505 VPH

No Left Turn Lane

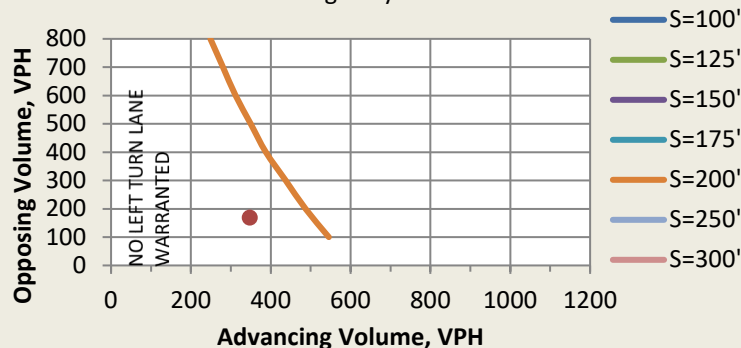
Right Turn Taper Warrant: Rt. Turn Volume \geq 53 VPH

No Taper Required

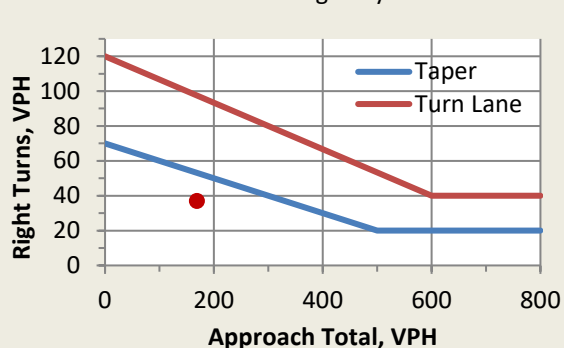
Right Turn Lane Warrant: Rt. Turn Volume \geq 98 VPH

No Right Turn Lane Required

Warrant for Left-Turn Storage Lane
2-Lane Highway



Warrants for Right Turn Treatments
2-Lane Highway



- The minimum warranted left turn lane length shall be 100' for speeds ≤ 40 mph and 200' for speeds ≥ 45 mph
- Left turn lanes with high truck volume shall be increased as calculated and tabulated below:

Left Turn Storage Length Increase Required for Truck Ratio (in Feet)						
S = 100'	S = 125'	S = 150'	S = 175'	S = 200'	S = 250'	S = 300'
25	25	25	25	25	25	50

General Project Information

Enter a value for all input cells

Project Name: Green Ridge - US 60 at Pinegrove Road / Frenchs Store

County: Cumberland

Reviewer: Build 2027, PM Peak Hour

Date: 4/28/2023

Adjacent Roadway Data

Adjacent Road Name: U.S. 60

Number of Lanes: 2

Posted Speed: 55 mph *

Classification: Minor Rural Arterial

AADT: N/A VPD D: N/A k: N/A *enter N/A if factors are unknown*

*Use Design Speed if available

Trip Generation

Generated Trips: 550 VPD

% Trucks in Entrance: 12 %

Right In: 49 VPH

Advancing Volume: 196 VPH

Left In: 14 VPH 7%

Opposing Volume: 359 VPH**

**Also used as Approaching Volume for Rt. Turns

Entrance Criteria

Entrance is a Standard Commercial Entrance

Entrance Type: Unsignalized Intersection/Crossover

Minimum Spacing: 1050 ft

SDL: 610 ft

SDR: 610 ft

Left Turn Lane Warrant: Advancing Volume \geq 371 VPH

No Left Turn Lane

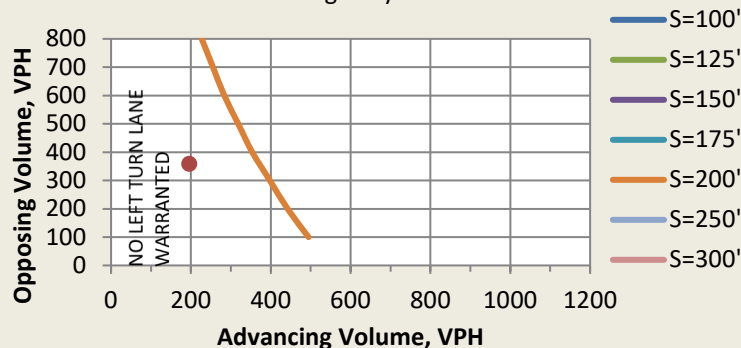
Right Turn Taper Warrant: Rt. Turn Volume \geq 34 VPH

200' Right Turn Taper Required

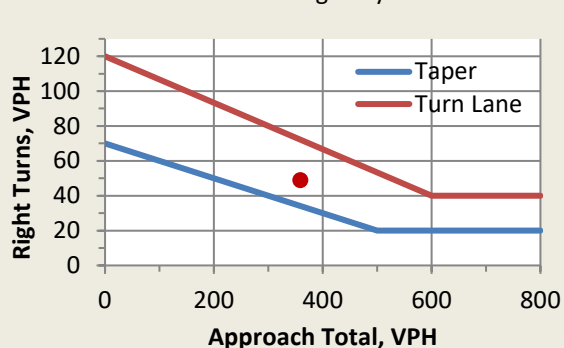
Right Turn Lane Warrant: Rt. Turn Volume \geq 72 VPH

No Right Turn Lane Required

Warrant for Left-Turn Storage Lane
2-Lane Highway



Warrants for Right Turn Treatments
2-Lane Highway



- The minimum warranted left turn lane length shall be 100' for speeds ≤ 40 mph and 200' for speeds ≥ 45 mph
- Left turn lanes with high truck volume shall be increased as calculated and tabulated below:

Left Turn Storage Length Increase Required for Truck Ratio (in Feet)						
S = 100'	S = 125'	S = 150'	S = 175'	S = 200'	S = 250'	S = 300'
25	25	25	25	25	25	50

General Project Information

Enter a value for all input cells

Project Name:

County:

Reviewer:

Date: 4/28/2023

Adjacent Roadway Data

Adjacent Road Name:

Number of Lanes: 2

Posted Speed: mph *

Classification:

AADT: VPD D: k: enter N/A if factors are unknown

*Use Design Speed if available

Trip Generation

Generated Trips: VPD

% Trucks in Entrance: %

Right In: VPH

Advancing Volume: VPH

Left In: VPH 50%

Opposing Volume: VPH**

**Also used as Approaching Volume for Rt. Turns

Entrance Criteria

Entrance is a Standard Commercial Entrance

Entrance Type:

Minimum Spacing: 50 (clear) ft

SDL: 610 ft SDR: 610 ft

Left Turn Lane Warrant: Advancing Volume \geq 267 VPH

No Left Turn Lane

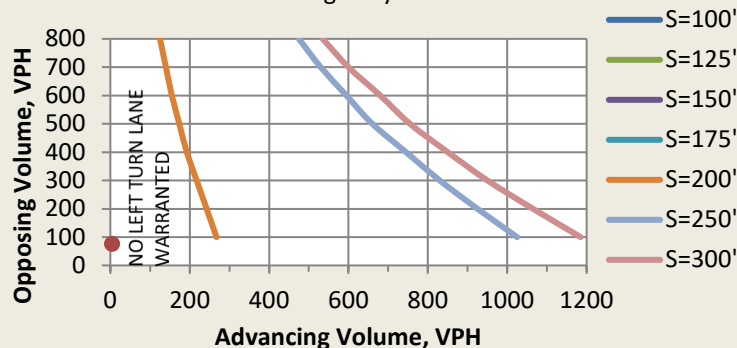
Right Turn Taper Warrant: Rt. Turn Volume \geq 62 VPH

No Taper Required

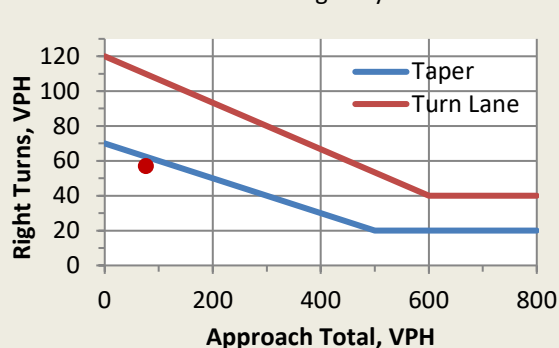
Right Turn Lane Warrant: Rt. Turn Volume \geq 110 VPH

No Right Turn Lane Required

Warrant for Left-Turn Storage Lane
2-Lane Highway



Warrants for Right Turn Treatments
2-Lane Highway



- The minimum warranted left turn lane length shall be 100' for speeds \leq 40 mph and 200' for speeds \geq 45 mph
- Left turn lanes with high truck volume shall be increased as calculated and tabulated below:

Left Turn Storage Length Increase Required for Truck Ratio (in Feet)

S = 100'	S = 125'	S = 150'	S = 175'	S = 200'	S = 250'	S = 300'
50	75	75	100	100	125	150

General Project Information		Enter a value for all input cells	
Project Name:	<input style="width: 95%;" type="text" value="Green Ridge - Pinegrove Road at Site Driveway"/>		
County:	<input style="width: 95%;" type="text" value="Cumberland"/>		
Reviewer:	<input style="width: 40%;" type="text" value="Build 2027, PM Peak Hour"/>	Date:	<input style="width: 40%;" type="text" value="4/28/2023"/>

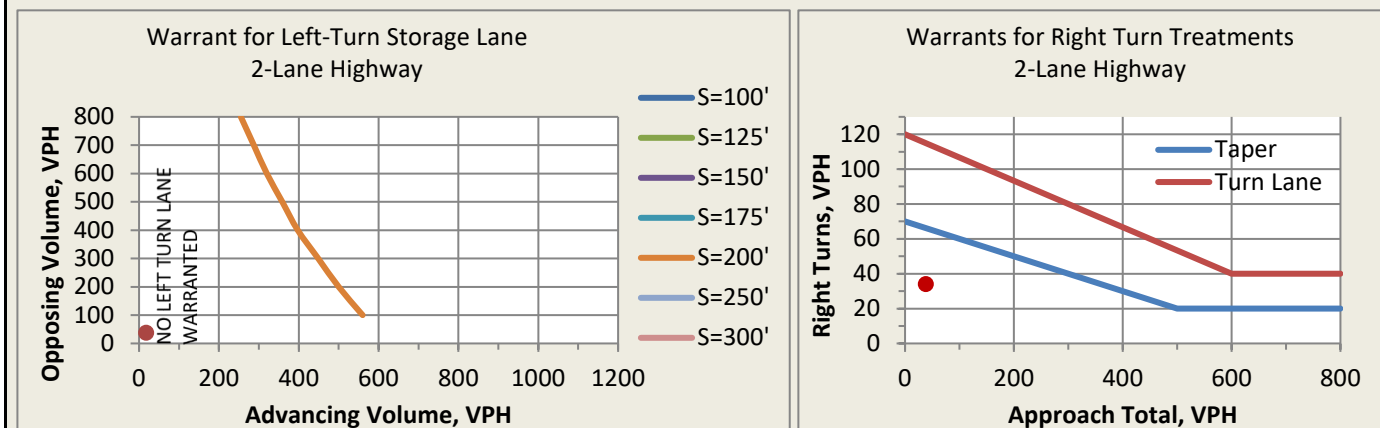
Adjacent Roadway Data			
Adjacent Road Name:	<input style="width: 60%;" type="text" value="Pinegrove Road"/>		Number of Lanes: 2
Posted Speed:	<input style="width: 10%;" type="text" value="55"/> mph *	Classification:	<input style="width: 40%;" type="text" value="Local Street/Road"/>
AADT:	<input style="width: 10%;" type="text" value="N/A"/> VPD	D:	<input style="width: 10%;" type="text" value="N/A"/> k: <input style="width: 10%;" type="text" value="N/A"/> enter N/A if factors are unknown

*Use Design Speed if available

Trip Generation			
Generated Trips:	<input style="width: 10%;" type="text" value="550"/> VPD	% Trucks in Entrance:	<input style="width: 10%;" type="text" value="55"/> %
Right In:	<input style="width: 10%;" type="text" value="34"/> VPH	Advancing Volume:	<input style="width: 10%;" type="text" value="18"/> VPH
Left In:	<input style="width: 10%;" type="text" value="0"/> VPH	0%	Opposing Volume: <input style="width: 10%;" type="text" value="38"/> VPH**

**Also used as Approaching Volume for Rt. Turns

Entrance Criteria		Entrance is a Standard Commercial Entrance	
Entrance Type:	<input style="width: 80%;" type="text" value="Full Access Entrance"/>		
Minimum Spacing:	<input style="width: 10%;" type="text" value="50 (clear)"/> ft	SDL:	<input style="width: 10%;" type="text" value="610"/> ft SDR: <input style="width: 10%;" type="text" value="610"/> ft
Left Turn Lane Warrant: Advancing Volume \geq	<input style="width: 10%;" type="text" value="560"/> VPH	No Left Turn Lane	
Right Turn Taper Warrant: Rt. Turn Volume \geq	<input style="width: 10%;" type="text" value="66"/> VPH	No Taper Required	
Right Turn Lane Warrant: Rt. Turn Volume \geq	<input style="width: 10%;" type="text" value="115"/> VPH	No Right Turn Lane Required	



- The minimum warranted left turn lane length shall be 100' for speeds ≤ 40 mph and 200' for speeds ≥ 45 mph
- Left turn lanes with high truck volume shall be increased as calculated and tabulated below:

Left Turn Storage Length Increase Required for Truck Ratio (in Feet)						
S = 100'	S = 125'	S = 150'	S = 175'	S = 200'	S = 250'	S = 300'
50	75	75	100	100	125	150



COMMONWEALTH of VIRGINIA

DEPARTMENT OF TRANSPORTATION

Stephen C. Brich, P.E.
Commissioner

1401 East Broad Street
Richmond, Virginia 23219

(804) 786-2701
Fax: (804) 786-2940

June 7, 2023

Wendy Karably, Program Manager
TRC Companies, Inc.
1030 Wilmer Avenue, Suite 100
Richmond, VA 23227

Re: Green Ridge Landfill – Traffic Impact Analysis
Cumberland County

Ms. Karably,

VDOT has reviewed the Traffic Impact Analysis (TIA), dated April 27, 2023, for the Green Ridge Landfill. This TIA is for the site with a proposed driveway on Route 654, Pine Grove Road. The Green Ridge Landfill has been previously approved with a driveway on Route 60, Anderson Highway. A TIA was done as part of the original site design and found the proposed entrance on Route 60 acceptable as designed. This TIA covers the impacts that were not covered in the original TIA and site design.

VDOT concurs with the assumptions, methodology, and conclusions in the TIA. The installation of a westbound right turn taper on Route 60 at the intersection of Route 654 is warranted for this site design. The build out condition of this TIA results in 1,250 AADT on Route 654 with 70% of that daily traffic being heavy trucks. This is a significant increase from the existing 300 AADT with 10% of that being heavy trucks. VDOT recommends widening Route 654 to twenty-two feet (22') between the site entrance and Route 60 to mitigate the significant increase in daily, heavy truck traffic.

If you have any questions, feel free to contact me at 434-394-8684.

With warm regards,

A handwritten signature in blue ink, appearing to read "Scott D. Frederick".

Scott D. Frederick, P.E.
Resident Engineer – Farmville

ATTACHMENT PTA-XVIII - ADJACENT PROPERTY OWNER NOTIFICATION

As required by §9 VAC 20-81-460.I., a written notice has been sent to all adjacent property owners or occupants. A signed statement, a typical copy of the notice, and the names and addresses of those to whom the notice were sent are included. In addition, Cumberland County notified adjacent property owners during the conditional use and rezoning process. This information is also included for reference.

The Part A Application was originally submitted to DEQ on January 22, 2020. It was reviewed by DEQ and Technical Review No. 1 (TR 1) issued on April 8, 2021. TR 1 had one comment on notification as follows:

- 4.) *Attachment XVIII includes a list of the parcels and addresses whose owners or occupants were notified of the proposed landfill, in accordance with 9 VAC 20-81-460.I. However, the following twenty-two parcels appear to be adjacent to the proposed landfill and could not be located in Attachment XVIII:*

38-A6-A	44-A-24	45-1-39	45-A-12-D
44-A-16	44-A-23	45-1-35	45-A-12-E
45-A-2	44-A-31	45-1-34	45-A-12-A
45-A-2-D	44-A-35-A	45-A-15-A	*Unidentified Parcel SE of Jones Site
45-A-11	44-A-38	45-A-15-B	
45-2-3-D	44-A-37	45-A-16	

Please verify that these parcels were notified as necessary, in accordance with 9 VAC 20-81-460.I.

The response to this comment was provided on October 1, 2021. The response referenced Letter Attachment 4 which is included in this current submittal (along with the appropriate Part A documents). See list below.

Subsequently, DEQ issued Technical Review No. 2 (TR 2) on June 16, 2022, with an addendum to TR 2 issued on October 25, 2022. No comments specific to this attachment were received.

On May 12, 2023, a draft TR 2 response addressing updates to the Part A documents was submitted by TRC to DEQ for review and comment. Comments were received from DEQ via email on June 29, 2023. No comments were received on this attachment.

The following is a list of documents that are associated with this section (including information from the original Part A and TR 1 response):

TR 1 – Response – 10/01/2021:

- Letter Attachment 4 – Certification of Supplemental Notice to Adjacent Property Owners, dated 10/01/2021 signed by Jerry Cifor
- Letter Attachment 4 – Supplemental Notice – Exhibit A – example letter submitted

Part A – Original submittal - Attachment PTA-XVIII – 01/22/2020

- Signed Certification of Notification dated 01/14/2020 signed by Jerry Cifor
- Cumberland list – all adjacent property owners
- Example letter submitted, dated 12/12/2019
- Cumberland County – Planning Commission – REZ – list of notifications, mailed 06/01/2018
- Cumberland County – Planning Commission – CUP – list of notifications, mailed 06/01/2018
- Cumberland County – Board of Supervisors – CUP – list of notifications, mailed 06/12/2018

ATTACHMENT 1

TR 1 – RESPONSE – 10/01/2021

ATTACHMENT XVIII

CERTIFICATION OF SUPPLEMENTAL NOTICE TO ADJACENT PROPERTY OWNERS

Pursuant to 9 VAC 20-81-10, *et seq.* of the Virginia Solid Waste Management Regulations (“VSWMR” or “Regulations”) and in response to an April 8, 2021 letter from Dean E. Starook, Groundwater Remediation Specialist, Virginia, Department of Environmental Quality, Piedmont Regional Office (“April 8 Letter”) to Jerry Cifor, President, Green Ridge Recycling and Disposal Facility, LLC (“Green Ridge” or “Company”), Green Ridge submits this Supplemental Attachment XVIII to the Company’s Part A Permit Application (“JPA” or “Part A Application”) for the Green Ridge Recycling and Disposal Facility (“Facility”), providing additional certification of notice to all owners of property adjacent to the proposed Facility.

On January 17, 2020 and in accordance with 9 VAC 20-81-460 I of the VSWMR, Green Ridge submitted its Notice of Intent (“NOI”) and Part A Application, including Attachment XVIII thereto (“Certification”), certifying that written notice was sent to all owners or occupants of property adjacent to the Facility in Cumberland County. The initial Certification stated that, in providing such notice, “[t]he applicant relied on the notifications sent by Cumberland County during the rezoning and conditional use permit activities which required that the adjacent property owners be notified.” It further provided that “[a] list of names and addresses of the adjacent property owners or occupants, along with a sample copy of the notification letter has been included with this statement.” See JPA Attachment XVIII, dated January 14, 2020, accompanying sample notice letter (“Notice Letter”) and lists of adjacent property owners provided by Cumberland County utilized to notify owners of hearings regarding rezoning of the proposed site (collectively, “Address Lists”).

In its April 8 Letter, the Virginia Department of Environmental Quality Piedmont Regional Office (“DEQ”) advised that, as indicated in a December 11, 2020 Completeness Review Letter, DEQ found the Part A Application to be “**administratively complete**.” (April 8 Letter at 1, ¶ 2 (emphasis in original)). However, it stated that a technical review found the JPA “**technically inadequate**,” (*Id.*), based in part on DEQ’s assessment of Attachment XVIII. As the April 8 Letter notes, “Attachment XVIII includes a list of the parcels and addresses whose owners or occupants were notified of the proposed landfill in accordance with 9 VAC 20-81-460 I.” *Id.* at 2, ¶ 4). The April 8 Letter states, however, that “the following twenty-two [22] parcels appear to be adjacent to the proposed landfill [but] could not be located in Attachment XVIII:”

Green Ridge Recycling and Disposal Facility, LLC
 JOINT PERMIT APPLICATION – PART A
 ATTACHMENT XVIII: ADJACENT OWNER NOTIFICATION

38-A6-A	44-A-24	45-1-39	45-A-12-D
44-A-16	44-A-23	45-1-35	45-A-12-E
45-A-2	44-A-31	45-1-34	45-A-12-A
45-A-2-D	44-A-35-A	45-A-15-A	*Unidentified parcel SE of Jones Site
45-A-11	44-A-38	45-A-15-B	
45-2-3-D	44-A-37	45-A-16	

Id.

Green Ridge acknowledges that the Address Lists provided in Attachment XVIII do not include the parcel number of the properties notified along with the property owners' names and addresses. Nevertheless, in the table provided below, Green Ridge has matched the parcel numbers to each of the properties identified in the April 8 Letter:

Notice of Intent and Part A Permit Application – Technical Review

Attachment XVIII: Certification and Documentation of Adjacent Property Owner Notification

Parcel #	Property Owner	Owner Address	Property Address	Adj Owner List: CCPC - Rezoning	Adj Owner List: CCPC - CUP	Adj Owner List: CCBOS – CUP
38-A-6-A	GREEN, LINDA K., TRUSTEE	264 MILLER LANE CUMBERLAND, VA, 23040	264 MILLER LANE CUMBERLAND 23040	Notification Mailed 6/1/2018	Notification Mailed 6/1/2018	Notification Mailed 6/12/2018
44-A-16	GREGORY, ROOSEVELT	64 FRENCHS STORE ROAD CUMBERLAND, VA, 23040	263 PINEGROVE ROAD CUMBERLAND 23040	Notification Mailed 6/1/2018	Notification Mailed 6/1/2018	Notification Mailed 6/12/2018
44-A-24	SPROUSE, HUBBARD A. & BARBARA A.	4804 WELLINGTON FARMS DRIVE CHESTER, VA, 23831	n/a	Notification Mailed 6/1/2018	Notification Mailed 6/1/2018	Notification Mailed 6/12/2018
44-A-23	GREEN RIDGE RECYCLING & DISPOSAL	411 ROUTE 146 HALFMOON, NY, 12065	60 MILLER LANE CUMBERLAND 23040	Not Listed	Not Listed	Not Listed
44-A-31	SPROUSE, HUBBARD A. & BARBARA A.	4804 WELLINGTON FARMS DRIVE CHESTER, VA, 23831	n/a	Notification Mailed 6/1/2018	Notification Mailed 6/1/2018	Notification Mailed 6/12/2018

Green Ridge Recycling and Disposal Facility, LLC
JOINT PERMIT APPLICATION – PART A
ATTACHMENT XVIII: ADJACENT OWNER NOTIFICATION

Parcel #	Property Owner	Owner Address	Property Address	Adj Owner List: CCPC - Rezoning	Adj Owner List: CCPC - CUP	Adj Owner List: CCBOS – CUP
44-A-35-A	JENKINS, TONI N.	30 LIBERTY LANE CUMBERLAND, VA, 23040	30 LIBERTY LANE CUMBERLAND 23040	Notification Mailed 6/1/2018	Notification Mailed 6/1/2018	Notification Mailed 6/12/2018
44-A-38	MILLER, ROBERTA H.	103 PINEGROVE ROAD CUMBERLAND, VA, 23040	38 LIBERTY LANE CUMBERLAND 23040	Notification Mailed 6/1/2018	Notification Mailed 6/1/2018	Notification Mailed 6/12/2018
44-A-37	GREEN RIDGE RECYCLING & DISPOSAL	411 ROUTE 146 HALFMOON, NY, 12065	n/a	Not Listed	Not Listed	Not Listed
45-1-39	PALMORE, ELLIS M. LUMBER, INC.	2575 BALLSVILLE ROAD POWHATAN, VA, 23139	n/a	Notification Mailed 6/1/2018	Notification Mailed 6/1/2018	Notification Mailed 6/12/2018
45-1-35	GREEN RIDGE RECYCLING & DISPOSAL	411 ROUTE 146 HALFMOON, NY, 12065	2375 MOSBY ROAD POWHATAN 23139	Notification Mailed 6/1/2018	Notification Mailed 6/1/2018	Notification Mailed 6/12/2018
45-1-34	GREEN RIDGE RECYCLING & DISPOSAL	411 ROUTE 146 HALFMOON, NY, 12065	n/a	Not Listed	Not Listed	Not Listed
45-2-3-D	CLARK, DAVID T. & ELIZABETH K.	62 MILLER LANE CUMBERLAND, VA, 23040	n/a	Notification Mailed 6/1/2018	Notification Mailed 6/1/2018	Notification Mailed 6/12/2018
45-A-11	PILLAI, SIVANAND SUBRAMANIAN &	14846 ELLIOT RIDGE WAY GLEN ALLEN, VA, 23059	110 ANDERSON HWY CUMBERLAND 23040	Notification Mailed 6/1/2018	Notification Mailed 6/1/2018	Notification Mailed 6/12/2018
45-A-15-A	HATCH, GEORGE M. III & REBECCA A.L.	15 ANDERSON HWY POWHATAN, VA, 23139	15 ANDERSON HWY POWHATAN 23139	Notification Mailed 6/1/2018	Notification Mailed 6/1/2018	Notification Mailed 6/12/2018
45-A-15-B	AUGUSTINO, CHERYLE ELIZABETH &CHASE	29 ANDERSON HWY POWHATAN, VA, 23139	29 ANDERSON HWY POWHATAN 23139	Address listed under Mark Poole	Address listed under Mark Poole	Address listed under Mark Poole

Green Ridge Recycling and Disposal Facility, LLC
JOINT PERMIT APPLICATION – PART A
ATTACHMENT XVIII: ADJACENT OWNER NOTIFICATION

Parcel #	Property Owner	Owner Address	Property Address	Adj Owner List: CCPC - Rezoning	Adj Owner List: CCPC - CUP	Adj Owner List: CCBOS – CUP
45-A-16	MCCRAW, WAYNE T.	31 ANDERSON HWY POWHATAN, VA, 23139	31 ANDERSON HWY POWHATAN 23139	Notification Mailed 6/1/2018	Notification Mailed 6/1/2018	Notification Mailed 6/12/2018
45-A-12-D	HARDY, KEVIN P. & PAMELA S.	53 ANDERSON HWY POWHATAN, VA, 23139	53 ANDERSON HWY POWHATAN 23139	Not Listed	Not Listed	Not Listed
45-A-12-E	KEN BROADWATER HOMES, LLC	99 RHODES LANE CARTERSVILLE, VA, 23027	n/a	Notification Mailed 6/1/2018	Notification Mailed 6/1/2018	Notification Mailed 6/12/2018
45-A-12-A	VALCO INVESTMENTS, LLC	913 SCOTCH PINE COURT SANDSTON, VA, 23150	n/a	Notification Mailed 6/1/2018	Notification Mailed 6/1/2018	Notification Mailed 6/12/2018
45-A-2	HOBSON, ALETHIA RENEE GREGORY	206 MILLER LANE CUMBERLAND, VA, 23040	206 MILLER LANE CUMBERLAND 0	Notification Mailed 6/1/2018	Notification Mailed 6/1/2018	Notification Mailed 6/12/2018
45-A-2-D	GREEN RIDGE RECYCLING & DISPOSAL	411 ROUTE 146 HALFMOON, NY, 12065	200 MILLER LANE CUMBERLAND 23040	Not Listed	Not Listed	Not Listed

As you can see from this table, the list reflects that notice was provided to all but six (6) of the 22 parcels DEQ identified in the April 8 Letter. Of these, five (5) are owned by Green Ridge (Parcel Nos. 44-A-23, 44-A-37, 45-1-34, 45-A-12-D and 45-A-2) and, therefore, were not required to be notified. With regard to the sole remaining property, Parcel No. 45-A-15-B, the owner of that property received actual, if not express, notice.

In or around June 1, 2018, Parcel No. 45-A-15-B was owned by Mark Poole at 29 Anderson Highway, Powhatan, Virginia. Green Ridge subsequently discovered that sometime prior to June 1, 2018 Mr. Poole died; however, Ownership of Parcel No. 45-A-15-B passed to Poole's daughter, Cheryl Augustino, who resided at 29 Anderson Hwy, Powhatan at the time of mailing of the notice. Accordingly, even if notice was misaddressed to Mark Poole, it was provided to the owner of the parcel at the owner's address of record and the Company has substantially complied with the Regulations.

Green Ridge Recycling and Disposal Facility, LLC
 JOINT PERMIT APPLICATION – PART A
 ATTACHMENT XVIII: ADJACENT OWNER NOTIFICATION

Thus, Green Ridge believes that all adjacent landowners received notice set forth in 9VAC 20-81-460 I. However, in order to ensure there can be no question regarding compliance with the Regulations notice provision, Green Ridge certifies that the attached notice, dated September 30, 2021, has been mailed to the adjacent landowners on record of the parcels identified in DEQ's April 8th letter, except for those parcels owned by Green Ridge. The notice, in the form attached hereto as Exhibit A and dated October 1, 2021, was mailed to the following:

Parcel #	Property Owner	Owner Address	Property Address
38-A-6-A	GREEN, LINDA K., TRUSTEE	264 MILLER LANE CUMBERLAND, VA, 23040	264 MILLER LANE CUMBERLAND 23040
44-A-16	GREGORY, ROOSEVELT	64 FRENCHS STORE ROAD CUMBERLAND, VA, 23040	263 PINEGROVE ROAD CUMBERLAND 23040
44-A-24	SPROUSE, HUBBARD A. & BARBARA A.	4804 WELLINGTON FARMS DRIVE CHESTER, VA, 23831	n/a
44-A-31	SPROUSE, HUBBARD A. & BARBARA A.	4804 WELLINGTON FARMS DRIVE CHESTER, VA, 23831	n/a
44-A-35-A	JENKINS, TONI N.	30 LIBERTY LANE CUMBERLAND, VA, 23040	30 LIBERTY LANE CUMBERLAND 23040
44-A-38	MILLER, ROBERTA H.	103 PINEGROVE ROAD CUMBERLAND, VA, 23040	38 LIBERTY LANE CUMBERLAND 23040
45-1-39	PALMORE, ELLIS M. LUMBER, INC.	2575 BALLSVILLE ROAD POWHATAN, VA, 23139	n/a
45-2-3-D	CLARK, DAVID T. & ELIZABETH K.	62 MILLER LANE CUMBERLAND, VA, 23040	n/a
45-A-11	PILLAI, SIVANAND SUBRAMANIAN &	14846 ELLIOT RIDGE WAY GLEN ALLEN, VA, 23059	110 ANDERSON HWY CUMBERLAND 23040
45-A-15-A	HATCH, GEORGE M. III & REBECCA A.L.	15 ANDERSON HWY POWHATAN, VA, 23139	15 ANDERSON HWY POWHATAN 23139
45-A-15-B	AUGUSTINO, CHERYLE ELIZABETH &CHASE	29 ANDERSON HWY POWHATAN, VA, 23139	29 ANDERSON HWY POWHATAN 23139
45-A-16	MCCRAW, WAYNE T.	31 ANDERSON HWY POWHATAN, VA, 23139	31 ANDERSON HWY POWHATAN 23139
45-A-12-D	HARDY, KEVIN P. & PAMELA S.	53 ANDERSON HWY POWHATAN, VA, 23139	53 ANDERSON HWY POWHATAN 23139
45-A-12-E	KEN BROADWATER HOMES, LLC	99 RHODES LANE CARTERSVILLE, VA, 23027	n/a
45-A-12-A	VALCO INVESTMENTS, LLC	913 SCOTCH PINE COURT SANDSTON, VA, 23150	n/a

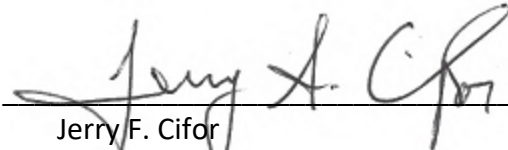
Green Ridge Recycling and Disposal Facility, LLC
JOINT PERMIT APPLICATION – PART A
ATTACHMENT XVIII: ADJACENT OWNER NOTIFICATION

Parcel #	Property Owner	Owner Address	Property Address
45-A-2	HOBSON, ALETHIA RENEE GREGORY	206 MILLER LANE CUMBERLAND, VA, 23040	206 MILLER LANE CUMBERLAND 0
45-1-40 ¹	GREEN RIDGE RECYCLING AND DISPOSAL FACILITY, LLC	411 Route 146 Halfmoon, NY 12065	

GREEN RIDGE RECYCLING AND DISPOSAL FACILITY, LLC

DATED: October 1, 2021

BY:


Jerry F. Cifor
President and Manager

¹ The parcel referenced as unidentified in the April 8 letter is Parcel Number 45-1-40. This parcel is owned by Green Ridge and, therefore, did not require notification.

Jerry Cifor
Green Ridge Recycling and Disposal Facility
12230 Deer Hill Road
Midlothian, Virginia 23112

October 1, 2021

**RE: Green Ridge Recycling and Disposal Facility
Part A Permit Application for a Municipal Solid Waste Landfill;**

**Tax Map Nos. 45-1-41, 45-2-2-B, 45-2-2-A, 44-A-21, 44-A-22, 44-A-36,
44-A-13, 44-A-14, 44-A-19-A, 45-A-7, 44-A-19, 44-A-20, 45-A-1, 38-A-
7, 37-A-69**

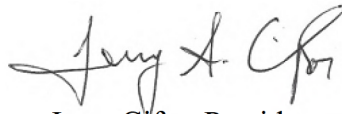
**Supplemental Notice to Adjacent Property Owners
Pursuant to 9 VAC 20-81-460 I**

Dear Sir/Madame:

Green Ridge Recycling and Disposal Facility, LLC (“Green Ridge” or “Company”) intends to construct and operate a solid waste management facility, including sanitary municipal solid waste (“MSW”) landfill and related facilities, on property located in Cumberland County on the north side of Route 60 near the Powhatan County line and comprised of parcels described by the Tax Map Numbers cited above (“Property”). The Property has a total area of approximately 1,117.63 acres.

County records indicate that you own/occupy real property adjacent to the above-referenced parcels in Cumberland County. Pursuant to 9 VAC 20-81-460 I of the Virginia Solid Waste Management Regulations (“VSWMR”), this letter provides supplemental notice that, on or about January 17, 2020, the Company filed its Part A Application for a permit to construct and operate the Green Ridge Facility on the above-referenced properties which Application has been deemed administratively complete via a December 11, 2020 Final Completeness Review Letter issued by the Virginia Department of Environmental Quality, Piedmont Regional Office (“DEQ”). In accordance with the Regulations, DEQ is currently reviewing the Part A Application for technical adequacy and regulatory compliance. You will be notified of any applicable public comment period or hearing regarding the Application. In the meantime, however, please feel free to contact me with any questions at (802) 379-1575 or jerry.cifor@myfairpoint.net.

Sincerely,



Jerry Cifor, President
Green Ridge Recycling
and Disposal Facility, LLC

ATTACHMENT 2

PART A – ORIGINAL SUBMITTAL

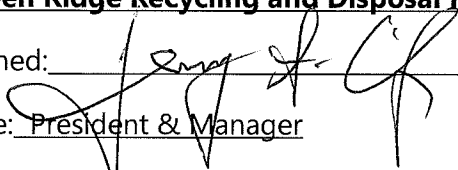
ATTACHMENT PTA-XVIII – JANUARY 22, 2020

ATTACHMENT PTA – XVIII
VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY
ADJACENT PROPERTY OWNER NOTIFICATION

GREEN RIDGE RECYCLING AND DISPOSAL FACILITY, LLC
Adjacent Property Owner Certification Statement

Pursuant to §9 VAC 20-81-460.I. of the Virginia Solid Waste Management Regulations (VSWMR, 9 VAC 20-81-10 et seq.) this document constitutes a statement by Green Ridge Recycling and Disposal Facility, LLC that written notice has been sent to all owners or occupants of the property adjacent to the proposed Green Ridge Recycling and Disposal Facility to be located in Cumberland County. The applicant relied on the notifications sent by Cumberland County during the rezoning and conditional use permit activities which required that the adjacent property owners be notified. A list of names and addresses of the adjacent property owners or occupants along with a sample copy of the notification letter has been included with this statement.

Green Ridge Recycling and Disposal Facility, LLC

Signed:  Date 1-14-2020

Title: President & Manager

Mailing Address: 12230 Deer Grove Road, Midlothian, VA 23112

Cell Phone: 802-379-1575

Email address: jerry.cifor@myfairpoint.net

31-A-1	676 AMERICAN TIMBERLAND LLC	1180 PEACHTREE ST, NE	SUITE 1810	ATLANTA, GA	30309	2135.294	0 VACANT				
37-A-63	13140 MARTIN, BLAKE AUBRE & DEIDRE D.	448 PINEGROVE RD		CARTERSVILLE, VA	23027	77.454	2011 DWELLING	CONV	CARTERSVILLE	PINEGROVE RD	
37-A-68	1264 JEFFERSON, LEONA, ET ALS	C/O VALERIE MURPHY	112 FAIRWAYS CRESCENT	CARMEL, NY	10512	43.19	0 VACANT				
37-A-70	9539 AGEE, SUNNY MARTIN & MARTIN, EDWARD	3679 ELLISVILLE DR		LOUISA, VA	23093	293.254	1868 DWELLING	CONV	CARTERSVILLE	PINEGROVE RD	
38-A-2	6400 PARKER, CHARLES LESTER, ET ALS	11 RITA DR		MOUNT SINAI, NY	11766	186.8	0 VACANT				
38-A-6	3578 TERRY, JAMES	300 MILLER LN		CUMBERLAND, VA	23040	19.28	1990 DWELLING	CONV	CUMBERLAND	MILLER LN	
38-A-6-B	16980 GREEN, RICHARD C., JR. & PEMBERTON,	246 MILLER LN		CUMBERLAND, VA	23040	37.6	2001 DWELLING	CONV	CUMBERLAND	MILLER LN	
38-A-6-D	17245 CEMETERY GILLIAM				0	1	0 CEMETERY				
44-A-12	6329 MARABLE, GEORGE	C/O ADRIENNE D. GRIST	531 MAIN ST #411	NEW YORK CITY, NY	10044	25	0 VACANT				
44-A-15	13829 OULIE, KEITH M.	PO BOX 51		CUMBERLAND, VA	23040	74.65	0 VACANT				
44-A-18	14180 SCOTT, HOWARD ESTATE	C/O ERLENE SCOTT BARRETT	1124 PARLIAMENT LAKE DR	COLUMBIA, SC	29223	102.88	1880 DWELLING	CONV	CUMBERLAND	PINEGROVE RD	
44-A-39	16301 BISE, JACKSON D.,JR. & JONATHAN D.	1828 BOYER RD		POWHATAN, VA	23139	128	0 VACANT				
44-A-52	18995 BISE, JACKSON D.,JR. & JONATHAN D.	1828 BOYER RD		POWHATAN, VA	23139	45	0 VACANT				
45-1-16	5089 MANAGE THIS, LLC	5825 CARTERSVILLE RD		POWHATAN, VA	23139	2	2002 DWELLING	DUPLEX	POWHATAN	LILY DR	
45-1-16-A	18153 MANAGE THIS, LLC	5825 CARTERSVILLE RD		POWHATAN, VA	23139	3.05	2002 DWELLING	DUPLEX	POWHATAN	LILY DR	
45-1-30-A	18554 GREEN, LARRY S. & SHARON R.	2365 MOSBY RD		POWHATAN, VA	23139	0.07	0 VACANT				
45-1-32	18159 GATES, JOSEPHINE E.	12600 OLD BUCKINGHAM RD		MIDLOTHIAN, VA	23113	2.36	0 VACANT				
45-1-36-A	15372 CROWDER, ROY H.	2379 MOSBY LN		POWHATAN, VA	23139	2.002	2010 DWELLING	CONV	POWHATAN	MOSBY RD	
45-1-37	12578 BELCH, ROBERT G.	2377 MOSBY LN		POWHATAN, VA	23139	4.46	1982 DWELLING	DOUBLEWIDE	POWHATAN	MOSBY RD	
45-1-38	11374 GREEN, LARRY S. & SHARON R.	2365 MOSBY RD		POWHATAN, VA	23139	4.48	0 IMPROVED				
45-2-1-A	1282 CLARK, DAVID T. & ELIZABETH K.	62 MILLER LN		CUMBERLAND, VA	23040	2	1997 DWELLING	SINGLEWIDE	CUMBERLAND	MILLER LN	
45-2-1-A1	18178 CLARK, DAVID T. & ELIZABETH K.	62 MILLER LN		CUMBERLAND, VA	23040	2.468	1996 DWELLING	SINGLEWIDE	CUMBERLAND	MILLER LN	
45-2-1-A2	18589 CLARK, DAVID T. & ELIZABETH	62 MILLER LN		CUMBERLAND, VA	23040	0.48	0 VACANT				
45-2-3-B	6646 CLARK, DAVID T., JR.	PO BOX 744		POWHATAN, VA	23139	17.296	0 VACANT				
45-2-3-C	17145 BOOKER, ELOUISE M, ET ALS	2503 VINEYARD LN		CROFTON, MD	21114	5	1996 DWELLING	DOUBLEWIDE	CUMBERLAND	80 MILLER LN/82 MILLER LN	
45-2-3-E	17635 CLARK, DAVID T.	62 MILLER LN		CUMBERLAND, VA	23040	16.098	0 VACANT				
45-2-3-E1	18350 CLARK, DAVID T., JR.	62 MILLER LN		CUMBERLAND, VA	23040	2.866	2004 DWELLING	CONV	CUMBERLAND	MILLER LN	
45-A-2-A	5736 GILLS, STEVE A.	192 MILLER LN		CUMBERLAND, VA	23040	1	1988 DWELLING	MODULAR	CUMBERLAND	MILLER LN	
45-A-2-G	18322 GILES, MICHAEL L., II	202 MILLER LN		CUMBERLAND, VA	23040	2	2007 DWELLING	CONV	CUMBERLAND	MILLER LN	
45-A-2-G3	18671 CASHION, BRUCE	21701 SAPPONY RD		MOSELEY, VA	23120	2	2007 DWELLING	CONV	CUMBERLAND	MILLER LN	
45-A-4-A	18070 GUNNARSSON, RAGNAR	57 ADLER LN		CUMBERLAND, VA	23040	76.18	0 VACANT				
45-A-6	8919 JAMES, CORA	5 ALDER LN		CUMBERLAND, VA	23040	0.5	1958 DWELLING	SINGLEWIDE	CUMBERLAND	ALDER LN	
45-A-8-A	9236 SCALES, JEFFREY C.	1359 CARTERSVILLE RD		CARTERSVILLE, VA	23027	10.001	2003 DWELLING	SINGLEWIDE	CUMBERLAND	128 MILLER LN/130 MILLER LN	
45-A-8-A1	18187 HOBSON, JESSE	PO BOX 352		CUMBERLAND, VA	23040	4.416	2003 DWELLING	MODULAR	CUMBERLAND	14 ALDER LN	
45-A-8-B	17814 HARVELL, JAMES CHRISTIAN	RR5 BOX 1882		COALGATE, OK	74538	0.476	0 VACANT				
45-A-9	887 CLARK, DAVID THOMAS, TRUSTEE	62 MILLER LN		CUMBERLAND, VA	23040	15	0 VACANT				

Jerry Cifor
Green Ridge Recycling and Disposal
Facility, LLC
12230 Deerhill Road
Midlothian, VA 23112
December 13, 2019

American Timberland LLC
1180 Peachtree Street, NE
Suite 1810
Atlanta, GA 30309

RE: Application for Solid Waste Management Permit

**Green Ridge Recycling and Disposal Facility with the Virginia Department of
Environmental Quality**

Tax Map Nos. 45-1-41, 45-1-40, 45-2-2-B, 45-2-2-A, 44-A-21, 44-A-22, 44-A-36, 44-A-13, 44-A-14, 44-A-19A, 45-A-7, 44-A-19, 44-A-20, 45-A-1, 38-A-7, and 37-A-69

Dear Sir/Madame:

Pursuant to § 9 VAC 20-81-460.I of the Virginia Solid Waste Management Regulations (VSWMR or Regulations), this letter serves as written notice to all owners or occupants of adjacent properties that Green Ridge Recycling and Disposal Facility, LLC ("Green Ridge") intends to construct and operate a solid waste management facility, involving a municipal (sanitary) landfill and related uses, on property located in Cumberland County on the north side of Route 60 near the Powhatan County line and described as Tax Map Nos. 45-1-41, 45-1-40, 45-2-2-B, 45-2-2-A, 44-A-21, 44-A-22, 44-A-36, 44-A-13, 44-A-14, 44-A-19A, 45-A-7, 44-A-19, 44-A-20, 45-A-1, 38-A-7, and 37-A-69 ("Property"). The Property has a total area of approximately 1,117.63 acres.

On June 28, 2018, after notice to adjacent property owners and public advertisements, Green Ridge received zoning and a Conditional Use Permit (CUP) from the Cumberland County Board of Supervisors for the construction and operation of a sanitary waste management facility and related uses on the Property.

This letter serves as notice and is to inform you that Green Ridge will be submitting a Part A Application to the Virginia Department of Environmental Quality to site a new landfill on the aforesaid Property. You are being notified because according to Cumberland County records, your property is adjacent to the proposed landfill Property.

If you have any comments or questions regarding this matter, please feel free to contact me at (802) 379-1575 or jerry.cifor@myfairpoint.net.



Jerry Cifor, President
GREEN RIDGE RECYCLING
AND DISPOSAL FACILITY, LLC

**Cumberland County Planning Commission
Adjacent Property Owner Notification
Rezoning Application
Notification mailed June 1, 2018
Public Hearing date June 14, 2018**

Owner Name	Owner Street Address	Owner City/State Address
American Timberland	1180 Peachtree St., NE	Atlanta, GA 30309
Edward Ray Martin	530 Pinegrove Rd	Cartersville, VA 23027
Blake Aubre & Diedre D. Martin	448 Pinegrove Rd	Cartersville, VA 23027
William & Cordel Wade	11 Portage Rd	West Hartford, CT 06117
Leona Jefferson et. al. c/o Wade Cordell	11 Portage Rd	West Hartford, CT 06117
Sunny Martin Agee, Roberts Samual, Jr. & Edward Ray Martin	3679 Ellisville Dr	Louisa, VA 23093
Eliz P & Mrs Bernard C N Cocke c/o Harding & Carbone	1235 North Loop West, Ste 205	Houston, TX 77008
Charles Lester Parker et al	11 Rita Dr	Mount Sinai, NY 11766
Susie Lightfoot c/o Florine Doughty	10054 E Albert Ct	Chesterfield, VA 23832
James Terry	300 Miller Ln	Cumberland, VA 23040
Linda L Green Trustee	264 Miller Ln	Cumberland, VA 23040
Richard C Green, Jr & Niko Pemberton	246 Miller Ln	Cumberland, VA 23040
W Garland & Sue Ellen Bailery	2268 Anderson Hwy	Cumberland, VA 23040
David A Toth	32 Brown Rd	Cumberland, VA 23040
Curtis W Daugherty	21438 Courtland Oaks St	Katy, TX 77494
CMH Homes, Inc	5000 Clayton Rd	Maryville, TN 37804
Joseph H, Jr & Janie Marie Franklin	274 Brown Rd	Cumberland, VA 23040
Keith M Oulie	PO Box 51	Cumberland, VA 23040
George Marable c/o Adrienne D Grist	531 Main St #411	New York City, NY 10044

Adjacent Property Owner Notification
Rezoning Application
Notification mailed June 1, 2018
Public Hearing date June 14, 2018

Owner Name	Owner Street Address	Owner City/State Address
Roosevelt Gregory	64 Frenchs Store Rd	Cumberland, VA 23040
Pine Grove Comm Ctr Trustee c/o Rev Muriel Miller Branch	3677 Forest Haven Dr	Richmond, VA 23234
Howard Scott Estate c/o Erlene Scott Barrett	1124 Parliament Lake Dr	Columbia, SC 29223
Jerry West	1117 Old Buckingham Rd	Powhatan, VA 23139
Hubbard A & Barbara A Sprouse	60 Miller Ln	Cumberland, VA 23040
Steven M & Vincent K Matthews	2717 Main Sail Ct	Henrico, VA 23233
Janice Nash Goode	327 Dry Bridge Rd	Farmville, VA 23901
Morris L Nash, For Life	327 Dry Bridge Rd	Farmville, VA 23901
Shon C Goode	14125 Bermuda Point Ct	Chester, VA 23831
Toni N Jenkins	30 Liberty Ln	Cumberland, VA 23040
Christopher W Loftis	97 Pinegrove Rd	Cumberland, VA 23040
Roberta H Miller	103 Pinegrove Rd	Cumberland, VA 23040
D Sherwoord Haddon, Jr	1995 Judes Ferry Rd	Powhatan, VA 23139
David Roy & Leslie Marie Diming	101 Pinegrove Rd	Cumberland, VA 23040
Jackson D, Jr & Jonathan D Bise	2620 Anderson Hwy	Powhatan, VA 23139
B&Q Properties LLC	2701 Pineridge Ln	Powhatan, VA 23139
Manage This, LLC	5825 Cartersville Rd	Powhatan, VA 23139
Larry S & Sharon R Green	2365 Mosby Rd	Powhatan, VA 23139
Josephine E Gates	12600 Old Buckingham Rd	Midlothian, VA 23113
Garland, Jr & Vickie Lee Isom	2375 Mosby Rd	Powhatan, VA 23139

Adjacent Property Owner Notification
Rezoning Application
Notification mailed June 1, 2018
Public Hearing date June 14, 2018

Owner Name	Owner Street Address	Owner City/State Address
Jerry H Morton & Guy J Haalboom	2369 Mosby Rd	Powhatan, VA 23139
Roy H Crowder	2379 Mosby Rd	Powhatan, VA 23139
Robert G Belch	2377 Mosby Rd	Powhatan, VA 23139
Ellis M Palmore Lumber, Inc	2575 Ballsville Rd	Powhatan, VA 23139
David T & Elizabeth Clark	62 Miller Ln	Cumberland, VA 23040
David T Clark, Jr	PO Box 74	Powhatan, VA 23139
Elouise M Booker et all	2503 Vineyard Ln	Crofton, MD 21114
David T Clark	62 Miller Ln	Cumberland, VA 23040
Sivandand Subramanian & Chadalavada Nagajyothi Pillai	11416 Abbotts Cross Ln	Glen Allen, VA 23059
Valco Investments, LLC	913 Scotch Pine Ct	Sandston, VA 23150
Randolph George Scott, Sr	PO Box 351	Cumberland, VA 23040
Jacob E Milburn	6678 Blenheim Rd	Powhatan, VA 23139
Elmer J & Faye N Heis	PO Box 271	Powhatan, VA 23139
Ken Broadwater Homes, LLC	99 Rhodes Ln	Cartersville, VA 23027
Clifton C & Kimberley White	1 Anderson Hwy	Powhatan, VA 23139
George M, III & Rebecca A L Hatch	15 Anderson Hwy	Powhatan, VA 23139
Mark J Poole	29 Anderson Hwy	Powhatan, VA 23139
William D & Wayne T McCraw	31 Anderson Hwy	Powhatan, VA 23139
Alethia Renee Gregory Hobson	206 Miller Ln	Cumberland, VA 23040
Steve A Gills	192 Miller Ln	Cumberland, VA 23040

Adjacent Property Owner Notification
Rezoning Application
Notification mailed June 1, 2018
Public Hearing date June 14, 2018

Owner Name	Owner Street Address	Owner City/State Address
John L Wade	PO Box 282	Cumberland, VA 23040
Bruce T Allen	224 Miller Ln	Cumberland, VA 23040
William Matthew Hatcher	200 Miller Ln	Cumberland, VA 23040
Michael L Giles, II	202 Miller Ln	Cumberland, VA 23040
Phillip R Gentile, III	204 Miller Ln	Cumberland, VA 23040
Bruce Cashion	21701 Sappony Rd	Mosely, VA 23120
Lloyd R & Gertrude O Crenshaw	208 Miller Ln	Cumberland, VA 23040
Sandra Cline	16 Alder Ln	Cumberland, VA 23040
Ragnar Gunnarsson	57 Alder Ln	Cumberland, VA 23040
Cora James	5 Alder Ln	Cumberland, VA 23040
Jeffrey C Scales	1359 Cartersville Rd	Cartersville, VA 23027
Jesse Hobson	PO Box 352	Cumberland, VA 23040
James Christian Harvell	RR % Box 1882	Coalgate, OK 74538
David Thomas Clark Trustee	62 Miller Ln	Cumberland, VA 23040
Theodore L Voorhees	3834 Old Buckingham Rd, Ste A	Powhatan, VA 23139

**Cumberland County Planning Commission
Adjacent Property Owner Notification
Conditional Use Permit Application
Notification mailed June 1, 2018
Public Hearing - June 14, 2018**

Owner Name	Owner Street Address	Owner City/State Address
American Timberland	1180 Peachtree St., NE	Atlanta, GA 30309
Edward Ray Martin	530 Pinegrove Rd	Cartersville, VA 23027
Blake Aubre & Diedre D. Martin	448 Pinegrove Rd	Cartersville, VA 23027
William & Cordel Wade	11 Portage Rd	West Hartford, CT 06117
Leona Jefferson et. al. c/o Wade Cordell	11 Portage Rd	West Hartford, CT 06117
Sunny Martin Agee, Roberts Samual, Jr. & Edward Ray Martin	3679 Ellisville Dr	Louisa, VA 23093
Eliz P & Mrs Bernard C N Cocke c/o Harding & Carbone	1235 North Loop West, Ste 205	Houston, TX 77008
Charles Lester Parker et al	11 Rita Dr	Mount Sinai, NY 11766
Susie Lightfoot c/o Florine Doughty	10054 E Albert Ct	Chesterfield, VA 23832
James Terry	300 Miller Ln	Cumberland, VA 23040
Linda L Green Trustee	264 Miller Ln	Cumberland, VA 23040
Richard C Green, Jr & Niko Pemberton	246 Miller Ln	Cumberland, VA 23040
W Garland & Sue Ellen Bailery	2268 Anderson Hwy	Cumberland, VA 23040
David A Toth	32 Brown Rd	Cumberland, VA 23040
Curtis W Daugherty	21438 Courtland Oaks St	Katy, TX 77494
CMH Homes, Inc	5000 Clayton Rd	Maryville, TN 37804
Joseph H, Jr & Janie Marie Franklin	274 Brown Rd	Cumberland, VA 23040
Keith M Oulie	PO Box 51	Cumberland, VA 23040

Adjacent Property Owner Notification
Conditional Use Permit Application
Notification mailed June 1, 2018
Public Hearing - June 14, 2018

Owner Name	Owner Street Address	Owner City/State Address
George Marable c/o Adrienne D Grist	531 Main St #411	New York City, NY 10044
Roosevelt Gregory	64 Frenchs Store Rd	Cumberland, VA 23040
Pine Grove Comm Ctr Trustee c/o Rev Muriel Miller Branch	3677 Forest Haven Dr	Richmond, VA 23234
Howard Scott Estate c/o Erlene Scott Barrett	1124 Parliament Lake Dr	Columbia, SC 29223
Jerry West	1117 Old Buckingham Rd	Powhatan, VA 23139
Hubbard A & Barbara A Sprouse	60 Miller Ln	Cumberland, VA 23040
Steven M & Vincent K Matthews	2717 Main Sail Ct	Henrico, VA 23233
Janice Nash Goode	327 Dry Bridge Rd	Farmville, VA 23901
Morris L Nash, For Life	327 Dry Bridge Rd	Farmville, VA 23901
Shon C Goode	14125 Bermuda Point Ct	Chester, VA 23831
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David Roy & Leslie Marie Diming	101 Pinegrove Rd	Cumberland, VA 23040
Jackson D, Jr & Jonathan D Bise	2620 Anderson Hwy	Powhatan, VA 23139
B&Q Properties LLC	2701 Pineridge Ln	Powhatan, VA 23139
Manage This, LLC	5825 Cartersville Rd	Powhatan, VA 23139
Larry S & Sharon R Green	2365 Mosby Rd	Powhatan, VA 23139

Adjacent Property Owner Notification
Conditional Use Permit Application
Notification mailed June 1, 2018
Public Hearing - June 14, 2018

Owner Name	Owner Street Address	Owner City/State Address
Josephine E Gates	12600 Old Buckingham Rd	Midlothian, VA 23113
Garland, Jr & Vickie Lee Isom	2375 Mosby Rd	Powhatan, VA 23139
Jerry H Morton & Guy J Haalboom	2369 Mosby Rd	Powhatan, VA 23139
Roy H Crowder	2379 Mosby Rd	Powhatan, VA 23139
Robert G Belch	2377 Mosby Rd	Powhatan, VA 23139
Ellis M Palmore Lumber, Inc	2575 Ballsville Rd	Powhatan, VA 23139
David T & Elizabeth Clark	62 Miller Ln	Cumberland, VA 23040
David T Clark, Jr	PO Box 74	Powhatan, VA 23139
Elouise M Booker et all	2503 Vineyard Ln	Crofton, MD 21114
David T Clark	62 Miller Ln	Cumberland, VA 23040
Sivandand Subramanian & Chadalavada Nagajyothi Pillai	11416 Abbotts Cross Ln	Glen Allen, VA 23059
Valco Investments, LLC	913 Scotch Pine Ct	Sandston, VA 23150
Randolph George Scott, Sr	PO Box 351	Cumberland, VA 23040
Jacob E Milburn	6678 Blenheim Rd	Powhatan, VA 23139
Elmer J & Faye N Heis	PO Box 271	Powhatan, VA 23139
Ken Broadwater Homes, LLC	99 Rhodes Ln	Cartersville, VA 23027
Clifton C & Kimberley White	1 Anderson Hwy	Powhatan, VA 23139
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William D & Wayne T McCraw	31 Anderson Hwy	Powhatan, VA 23139
Alethia Renee Gregory Hobson	206 Miller Ln	Cumberland, VA 23040
Steve A Gills	192 Miller Ln	Cumberland, VA 23040
John L Wade	PO Box 282	Cumberland, VA 23040
Bruce T Allen	224 Miller Ln	Cumberland, VA 23040
William Matthew Hatcher	200 Miller Ln	Cumberland, VA 23040
Michael L Giles, II	202 Miller Ln	Cumberland, VA 23040
Phillip R Gentile, III	204 Miller Ln	Cumberland, VA 23040
Bruce Cashion	21701 Sappony Rd	Mosely, VA 23120
Lloyd R & Gertrude O Crenshaw	208 Miller Ln	Cumberland, VA 23040
Sandra Cline	16 Alder Ln	Cumberland, VA 23040
Ragnar Gunnarsson	57 Alder Ln	Cumberland, VA 23040
Cora James	5 Alder Ln	Cumberland, VA 23040
Jeffrey C Scales	1359 Cartersville Rd	Cartersville, VA 23027
Jesse Hobson	PO Box 352	Cumberland, VA 23040
James Christian Harvell	RR % Box 1882	Coalgate, OK 74538
David Thomas Clark Trustee	62 Miller Ln	Cumberland, VA 23040
Theodore L Voorhees	3834 Old Buckingham Rd, Ste A	Powhatan, VA 23139

**Cumberland County Board of Supervisors
Adjacent Property Owner Notification
Conditional User Permit Application
Notification mailed June 12, 2018
Public Hearing June 28, 2018**

Owner Name	Owner Street Address	Owner City/State Address
American Timberland	1180 Peachtree St., NE	Atlanta, GA 30309
Edward Ray Martin	530 Pinegrove Rd	Cartersville, VA 23027
Blake Aubre & Diedre D. Martin	448 Pinegrove Rd	Cartersville, VA 23027
William & Cordel Wade	11 Portage Rd	West Hartford, CT 06117
Leona Jefferson et. al. c/o Wade Cordell	11 Portage Rd	West Hartford, CT 06117
Sunny Martin Agee, Roberts Samual, Jr. & Edward Ray Martin	3679 Ellisville Dr	Louisa, VA 23093
Eliz P & Mrs Bernard C N Cocke c/o Harding & Carbone	1235 North Loop West, Ste 205	Houston, TX 77008
Charles Lester Parker et al	11 Rita Dr	Mount Sinai, NY 11766
Susie Lightfoot c/o Florine Doughty	10054 E Albert Ct	Chesterfield, VA 23832
James Terry	300 Miller Ln	Cumberland, VA 23040
Linda L Green Trustee	264 Miller Ln	Cumberland, VA 23040
Richard C Green, Jr & Niko Pemberton	246 Miller Ln	Cumberland, VA 23040
W Garland & Sue Ellen Bailery	2268 Anderson Hwy	Cumberland, VA 23040
David A Toth	32 Brown Rd	Cumberland, VA 23040
Curtis W Daugherty	21438 Courtland Oaks St	Katy, TX 77494
CMH Homes, Inc	5000 Clayton Rd	Maryville, TN 37804
Joseph H, Jr & Janie Marie Franklin	274 Brown Rd	Cumberland, VA 23040
Keith M Oulie	PO Box 51	Cumberland, VA 23040

Adjacent Property Owner Notification
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ATTACHMENT PTA-XIX - PUBLIC INTEREST SERVED

Per Submission Instruction No. 1, the applicant is to provide a discussion on how the public interest will be served by the proposed facility based on one or more of the conditions listed under 9 VAC 20-81-460.K.1. through K.7.

The Part A Application was originally submitted to DEQ on January 22, 2020. It was reviewed by DEQ and Technical Review No. 1 (TR 1) issued on April 8, 2021. No comments were received on Attachment PTA-XIX under TR 1.

Subsequently, DEQ issued Technical Review No. 2 (TR 2) on June 16, 2022 with an addendum to TR 2 issued on October 25, 2022. Again, no comments specific to this attachment were received.

On May 12, 2023, a draft TR 2 response addressing updates to the Part A documents was submitted by TRC to DEQ for review and comment. Comments were received from DEQ via email on June 29, 2023. No comments were received on this attachment.

Since the original submittal, several additional localities have expressed their support for the project, specifically the Counties of Bedford and Prince George. Letters are included in this attachment.

A. REGULATORY REQUIREMENTS

Under the Part A submittal requirements (9VAC20-81-460.K) the applicant for a new solid waste management facility must provide indication that the public interest will be served in one or more of the categories identified in the regulation which include:

1. Cost effective waste management for the public within the service area comparing costs of a new facility or facility expansion to waste transfer, or other disposal option;
2. The facility provides protection of human health and safety and the environment;
3. The facility provides alternatives to disposal including reuse or reclamation;
4. The facility allows for the increased recycling opportunities for solid waste;
5. The facility provides for energy recovery or the subsequent use of solid waste, or both thereby reducing the quantity of solid waste disposed;
6. The facility will support the waste management needs expressed by the host community; or

7. Any additional factors that indicate that the public interest would be served by the facility.

The service area for this facility (Facility) is defined via the Host Agreement between the Cumberland County Board of Supervisors and Green Ridge Recycling and Disposal Facility LLC (Green Ridge) approved by the Board on August 2, 2018 as amended on July 11, 2019. In that agreement, the service area is identified as by a 500-mile radius from the Facility excluding the states of New York and New Jersey. After further consideration, the service area has been revised to include Virginia waste only.

Cumberland County as the host community has indicated its approval of the proposed Facility believing that it will be beneficial to the community and that it will serve the public. Specifically, three items have been cited in the benefits to the community:

Item 1: Cost Effective Waste Management

Cumberland County has been seeking options to mitigate the expenses of its solid waste program for years. In 2006, the County believed that it had an opportunity with Republic Waste Industries to mitigate these costs with Republic opening a landfill in Cumberland. The County also built a new school in anticipation of the Republic landfill. However, this opportunity fell through, and Republic has withdrawn its permits. As a result, the County sought options to offset its costs and replace the expected revenue from the proposed Republic landfill upon which it was so heavily relying.

To highlight the need, reference is made here to the County's solid waste management plan which outlines the need for cost effective waste management. The local solid waste management plan (SWMP) covers a region defined as Prince Edward County and Cumberland County. Key statements from the SWMP relevant to this discussion include the following:

- *"The planning district within which Prince Edward and Cumberland Counties are part of is described as: "one of the most economically challenged regions in the State of Virginia." (Page 6)*
- *"Both Prince Edward County and Cumberland County are largely rural with few large industries and manufacturing facilities." (Page 6)*
- *"Scarcity of higher paying salaries continues to impact in a negative manner, a locality's or region's primary source of income – its tax base. This in turn, often*

- inhibits growth in the locality or region because investments in needed infrastructures do not happen or are slow to occur.” (Page 7)*
- *Environmentally-sound solid waste management within the two counties remains a significant public function that demands a continuing allocation of resources. (Page 7)*
 - *“Along with highways, railroads, water, wastewater, schools and healthcare providers, well run and funded waste management facilities are an attraction to industrial, commercial and residential development.” (underlining added for emphasis) (Page 7)*

As reflected in the County’s SWMP, Cumberland County needs the Green Ridge Facility because it will provide the County with substantial and much needed revenues, jobs, and relief for the solid waste expenses of Cumberland County, thereby serving the local public interest.

In addition, the County’s Host Agreement with Green Ridge outlines numerous ways in which the Cumberland County public will be served. Some of the ways that the public will be served as identified in the Host Agreement include (but are not limited to) the following:

- Section 1.6 – Convenience Center at landfill for free disposal by residents; drop off recycling center
- Section 1.7 – Free disposal for County government facilities
- Section 2.1 – Host Fees – based on tonnage and unit cost per ton
- Section 2.2 – Initial fees of \$100,000 to defray costs for negotiations
- Section 2.3 – Annual contribution - \$25,000 for environmental and science public education or other activity as may be agreed upon by both parties.
- Section 2.4 – Recreational Facilities Contribution and Economic Opportunities – reversion of at least 25 acres to the County at the time of closure for public use; annual payment of \$25,000/year for promotion of economic development; promotion of a training program with the community college system
- Section 3.1 – Landfill Liaison – reimbursement of up to \$100,000 per year for an employee who will inspect landfill operations

(Green Ridge would note that the anticipated total annual revenue to Cumberland County from the Green Ridge facility should be approximately 3 million dollars, which represents almost 20% of the County’s current annual budget.)

Item 4: Increased Recycling

Cumberland County will be working with Green Ridge to enhance the County's recycling program. Funding under Section 2.3 of the Host Agreement and additional recycling at the landfill will allow the County to broaden its vision for recycling and expand services to the community. Without the support of Green Ridge (monetarily and operationally), Cumberland County simply could not afford to consider such enhancements. The increased recycling opportunities that Green Ridge would support will serve the public well.

Item 6: Facility Will Support Waste Management Need of Host Community

The Cumberland County Comprehensive Plan outlines a number of goals and objectives for the Cumberland community. Under Community Facilities, Objective 6 states: *"Develop and maintain appropriate public utilities to support current and future growth of all types in Cumberland County."* (Page 103) Policy 6.e states, *"Develop and maintain appropriate and cost effective solid waste management facilities, services and programs to serve the needs of citizens, businesses, industries and the environment."* The Green Ridge project (convenience center, recycling and disposal), as well as revenues generated by the project will help the County meet these objectives in addition to other goals outlined in the Cumberland Comprehensive Plan.

In short, Cumberland County firmly believes that the interests of the public will be served through the implementation of this project and has therefore supported it through the rezoning and conditional use permit approvals as well as a letter of written support urging DEQ's approval of Green Ridge's permit request.

B. LOCAL SUPPORT

In support of this project the following communities have provided letters of support or expressed interest in future capacity:

- Cumberland County – July 13, 2019
- CVWMA – June 28, 2019
- Hanover County – September 9, 2019
- Ashland – December 2, 2019
- Chesterfield County – December 3, 2019
- Rappahannock Regional Solid Waste Board – December 6, 2019

- Botetourt County – December 10, 2019
- Appomattox County – December 1, 2019
- Amherst County – March 3, 2020
- Dinwiddie County – February 14, 2020
- Madison County – February 12, 2020
- Colonial Heights – January 30, 2020
- Bedford County – April 22, 2020
- Prince George County – April 20, 2020

Copies of these letters are attached.

C. BROADER INTEREST SERVED

The public interest in the broader service area will also be well served by the Green Ridge Facility as outlined in the Preliminary Statement and Demonstration of Need included in Green Ridge's Notice of Intent. Key ways in which the broader public interest will be served include:

- As indicated in the Preliminary Statement and Demonstration of Need in the Notice of Intent, solid waste disposal for Cumberland County is a drain on its limited resources. The Green Ridge facility will offer relief to the County in a number of ways, including reduced disposal and recycling costs, as well as substantial revenues from the host fee and jobs. Cumberland County needs this project and actively supports it.
- Relative to the Cumberland/Prince Edward Region, Cumberland County currently transfers to the Shoosmith Landfill whose future expansion is under litigation; Prince Edward County operates its own landfill with a reported remaining life of approximately 14 years (2021 – LaBella report). Thus, the Green Ridge landfill will support this Region's solid waste plan once permitted and constructed.
- Contiguous solid waste regions rely heavily on private sector facilities which may or may not be able to support their 20-year goals. Region 2000 has less than 20 years of remaining life and at this time it appears highly doubtful that an expansion will be allowed by the host community. Green Ridge will support this region. In addition, members of the Central Virginia Waste Management Authority, which includes Henrico, Hanover, Goochland, Powhatan, Chesterfield Counties (to name a few), rely heavily on the Shoosmith and Old Dominion landfills, which will reach capacity in the next 20 years (Shoosmith will likely close within the next 3-4 years in light of a recent

adverse court decision). The CVWMA therefore has expressed interest in the guaranteeing disposal capacity in the Green Ridge landfill.

- From Initiation of a project to its construction, an increase in landfill capacity can take at least 5–6 years (or longer depending on the project). Capacity is always being consumed. New capacity will always be needed. Green Ridge will provide that needed capacity.
- Several major disposal facilities are currently struggling with local politics and land use issues relative to expansions, including the Shoosmith Landfill, the East End Landfill, and Region 2000. In addition, DEQ has revoked the permit of the Tri-Cities Landfill because of reoccurring violations. Many are rightly concerned about the loss of Shoosmith capacity and its ripple effects through Central Virginia because Shoosmith lost a recent circuit court case involving Chesterfield County's denial of a local certification needed to expand into Shoosmith's proposed quarry cell. Other localities, such as Amherst County, have determined not to utilize their remaining capacity, but to move to a transfer operation followed by landfill closure. There may be other facilities making decisions that impact available capacity. Green Ridge's capacity will therefore serve the greater good as capacity continues to be lost.
- Many public sector landfills have defined (restricted) service areas and cannot accept waste from out of their service area. This capacity is therefore not available to others in Virginia and should not be a factor in the 20-year calculation. Green Ridge will fill such voids in capacity.
- Tipping fees and disposal costs for local governments are determined by competition and available capacity. Currently, only two companies control almost all of the private waste disposal capacity in Virginia. The Green Ridge facility is needed to increase competition.
- County Waste of Virginia, which will utilize the Green Ridge Recycling and Disposal Facility, currently serves over 237,000 residential accounts as well as VCU, University of Richmond, Liberty University, Lynchburg University, Frito Lay, DuPont, Altria and a plethora of Central Virginia home builders and homeowner associations. Without the Green Ridge facility, costs to these entities will increase with the increased distance to a disposal facility and increased tipping fees because of the loss of competition. Indeed, this is already happening. VCU just procured disposal services which increased in 2019 from \$18.89/ton to \$44.30/ton, a reflection purely of cost increased in disposal and the loss of competition in the industry in Virginia.

- Fuel costs will continue rising. Each additional mile traveled will cost citizens of the Commonwealth dollars and increase carbon footprints. The Green Ridge Facility is exceptionally positioned to effectively and efficiently serve the Central and Southwest Virginia region.
- The Green Ridge facility will be open to all localities in Virginia. It is not exclusive like most public landfills. As public landfills reach capacity and as the costs to own and operate a public landfill increase, localities in Virginia will be seeking alternative disposal capacity that is cost effective. Green Ridge will be able to provide such cost effective capacity.
- An assured, cost effective waste disposal system is needed for economic development. Green Ridge will expand the options for commercial and industrial development through its hauling, recycling, and disposal operations.
- The Northeast is in the midst of a crisis vis a vis its disposal capacity, and will need additional options for disposal of its waste. Virginia is likely to get inundated by out-of-state waste as a result, making the need for the Green Ridge project that much more stark.
- As explained at length in Green Ridge's Preliminary Statement to the Demonstration of Need, it is anticipated that within 3-4 years, 99% of Virginia's private landfill capacity will be controlled by just two companies. The Green Ridge facility will not only provide much needed waste disposal capacity, but also will create much needed competition, lowering waste disposal costs for local and state governments as well as citizens and businesses in the Commonwealth.

The following is a list of documents that are associated with this section:

- Listing of localities contacted and responses received
- Letters of Support

Green Ridge Recycling and Disposal Facility
Actual responses to offer to reserve capacity
(LISTING OF RESPONSES RECEIVED - COUNTIES - CITIES, TOWNS)

Final Part A Submission - August 2023

Locality	Accept reserve disposal capacity? (Y/N)	Response Date
County of Accomack	N	5/30/2019
County of Amherst	Y	3/16/2020
County of Appomattox	Y	12/1/2019
County of Augusta	N	5/13/2019
County of Bedford	Y	4/22/2020
County of Botetourt	Y	12/10/2019
County of Chesterfield	Y	12/3/2019
County of Cumberland	Y	7/13/2019
County of Dinwiddie	Y	2/14/2020
County of Floyd	N	5/9/2019
County of Franklin	N	5/9/2019
County of Fluvanna	N	5/29/2019
County of Hanover	Y	9/9/2019
County of King George	N	5/20/2019
County of Lunenburg	N	6/18/2019
County of Madison	Y	2/12/2020
County of Nottoway	N	5/16/2019
County of Prince George	Y	4/20/2020
County of Roanoke	N	5/7/2019
County of Russell	N	5/9/2019
County of Scott	N	6/14/2019
County of Southampton	N	6/24/2019
County of Warren	N	5/9/2019
County of Wythe	N	5/29/2019
City of Chesapeake	N	5/22/2019
City of Colonial Heights	Y	1/30/2020
City of Emporia	N	5/20/2019
City of Roanoke	N	6/14/2019
City of Salem	N	5/17/2019
Town of Alberta	N	5/9/2019
Town of Ashland	Y	12/2/2019
Town of Charlotte Courthouse	N	5/9/2019
Town of Christiansburg	N	5/29/2019
Town of Claremont	N	5/11/2019
Town of Farmville	N	5/13/2019
Town of Floyd	N	5/17/2019
Town of Gordonsville	N	5/6/2019
Town of Hurt	N	5/17/2019
Town of La Crosse	N	5/10/2019
Town of Middleburg	N	5/7/2019
Town of Nassawadox	N	5/6/2019
Town of Ridgeway	N	5/6/2019
Town of St. Paul	N	6/18/2019
Town of Victoria	N	5/20/2019
Town of Vinton	N	5/8/2019
CVWMA (on behalf of Counties of Charles City, Chesterfield, Goochland, Hanover, Henrico, New Kent, Powhatan, and Prince George; the Town of Ashland, and the Cities of Colonial Heights, Hopewell, Petersburg, and Richmond.)	Y	6/28/2019
R-Board (on behalf of the County of Stafford, and the City of Fredericksburg)	Y	12/6/2019



County of Cumberland Virginia

1 Courthouse Circle |
P.O. Box 110
Cumberland, Virginia 23040
Telephone 804 492 3800
Facsimile 804 492 9224
cumberlandcounty.virginia.gov

William F. Osl, Jr
District 1

Lloyd Banks Jr
District 2

William K. "Kevin" Ingle
District 3

David E. Meinhard
District 4

Parker H. Wheeler
District 5

July 13, 2019

Mr. James Golden, Regional Director
Virginia Department of Environmental Quality
Piedmont Regional Office
4949-A Cox Road
Glen Allen, Virginia 23060

Mr. Jason Miller, Land Protection Manager
Virginia Department of Environmental Quality
Piedmont Regional Office
4949-A Cox Road
Glen Allen, Virginia 23060

Re: Green Ridge Recycling and Disposal Facility
Part A Application – PTA Attachment XIX – Discussion of Public Interest Served

Dear Mr. Golden and Mr. Miller:

Cumberland County is writing this letter to provide information and support for the Part A application of Green Ridge Recycling and Disposal Facility, LLC (Green Ridge) for the construction and operation of a municipal sanitary landfill in Cumberland County. Specifically, Green Ridge must address how the public interest will be served by the landfill, a matter which was considered by Cumberland County officials upon deliberating the Green Ridge rezoning and the conditional use permit applications. The Board of Supervisors of Cumberland County, supported by staff, specifically considered the following items which also are considerations for your Department under 9VAC20-81-460.K:

- 1. Cost effective waste management:** Currently Cumberland County spends in excess of \$600,000 per year for the hauling and disposal of its solid waste. This cost is a significant percentage of our local revenues, which total just under \$13,000,000, and constitutes the county's greatest single contractual expense. The Board, when considering the facility, discussed the benefit that a local municipal solid waste facility will provide, not only to Cumberland County, but also to other localities which will be able to use the facility. Tipping fees appear to be on the rise, which could only be exacerbated by reducing solid waste disposal capacity in the Commonwealth. In short, Cumberland County, like all localities, must plan now for efficient and low-cost solid waste disposal solutions for the future. In fact, this consideration has been so important to Cumberland County planning that the Cumberland County Comprehensive Plan even provides in pertinent part that one objective of the county is to "[d]evelop and maintain appropriate and cost effective solid waste management facilities, services and programs to serve the needs of citizens, businesses, industries and the environment." The Green Ridge project will help the county achieve this objective.



2. **Increased recycling opportunities.** Cumberland County is committed to maximizing recycling opportunities for citizens and providing services to assist with environmental quality in the county. For example, once, and sometimes twice, each year, the county hosts a tire collection day. Citizens are encouraged to bring old tires to be recycled, with each citizen being permitted to bring, free of charge, up to one hundred tires. In addition, recycling containers are provided for citizens at each solid waste collection site. And toward the goal of increasing recycling efforts, Cumberland County ensured that there was language in the Green Ridge Host Agreement for the continued provision of recycling containers and services (paragraph 1.6) and funding for environmental and science education. Finally, and because the county continues to explore ways to encourage recycling, staff is exploring with a private partner an opportunity to optimize the recycling of plastic, which Green Ridge representatives have committed to support as well.
3. **Support the waste management need of the host community.** Management of solid waste is the second greatest total departmental expense in Cumberland County, second only to the sheriff's department. Because the Green Ridge facility will provide disposal of the county's solid waste at no charge, leaving only the hauling for the county to be responsible for, the facility will provide a significant benefit to the county's budget. Disposal fees will be eliminated, and the expectation is that hauling will cost significantly less as the hauling distances will be reduced greatly. Further, construction of the Green Ridge facility will ensure not only a less expensive disposal option, but also will ensure that there is, in fact, a disposal option available at all. Upon the publication of the county's last request for bids for the provision of solid waste disposal service, only three companies, including Green Ridge affiliated company County Waste, expressed an interest in bidding. It is not uncommon for there to be only one or two bidders for services in Cumberland County, which has become a constant and growing concern, not just for the disposal of solid waste, but for many services the county needs. However, because the disposal of solid waste is an absolute need, not to mention an environmental concern, the county places high importance on identifying an environmentally responsible manner in which to dispose of its municipal solid waste for decades to come. The Green Ridge facility will ensure the County will have that option at a manageable cost.

In closing, the Board of Supervisors of Cumberland County, Virginia approved on June 28, 2018 the Green Ridge rezoning and conditional use permit applications for the construction and operation of a municipal sanitary landfill. On August 2, 2018, the Cumberland County Board of Supervisors approved a Host Agreement with Green Ridge, which agreement was amended on July 11, 2019. Cumberland County supports the Green Ridge facility in Cumberland County because the County assumes that with oversight by the Virginia Department of Environmental Quality, the facility will be constructed and operated in an environmentally responsible manner. Cumberland County consistently endeavors to work collaboratively with state agencies, and this project is no exception. The County is grateful for the expertise and assistance of DEQ on this and all projects and requests support and assistance in return on the Green Ridge project. We thank you.

Sincerely,

Vivian Seay Giles, J.D., LL.M.
County Attorney| County Administrator



**APPOMATTOX COUNTY
BOARD OF SUPERVISORS**

P.O. Box 863, Appomattox, VA 24522 Phone: (434) 352-2637
www.AppomattoxCountyVA.gov

December 1, 2019

Mr. Jerry Cifor
Green Ridge Recycling and Disposal Facility, LLC
12230 Deerhill Road
Midlothian, VA 23112

RE: Appomattox County Letter of Support for the Green Ridge Recycling and Disposal Facility

Dear Mr. Cifor:

On behalf of Appomattox County, I am writing in support of the Green Ridge Recycling and Disposal Facility that your company is seeking to have permitted by the Virginia Department of Environmental Quality ("DEQ"). Appomattox County currently participates in the Region 2000 Service Authority, and the landfill that Region 2000 operates will reach capacity in approximately eight (8) years. Appomattox County currently generates approximately 5,300 tons of municipal solid waste annually, and that number is expected to increase. The Green Ridge facility represents an important option for Appomattox that needs to be available as Appomattox strives to meet its future waste disposal needs.

Moreover, County Waste of Southwest Virginia, LLC ("County Waste") recently obtained a conditional use permit to operate a transfer station in Appomattox County as well as a convenience center for County residents. Appomattox County has a Host Agreement with County Waste for that transfer station under which the County receives a fee for each ton of waste brought to the Appomattox transfer station. The transfer station represents a substantial, much needed revenue source for the County, and the transfer station will to a large extent rely on the Green Ridge facility.

In addition, most of the private landfill capacity in Virginia is controlled by two companies. The proposed Green Ridge Recycling and Disposal facility represents an opportunity to substantially lower waste disposal costs by increasing much needed competition.

In short, Appomattox County strongly supports your company's request for a DEQ permit to construct and operate a municipal solid waste landfill in Cumberland County, and you may submit this letter of support to DEQ in seeking any necessary permits for the facility.

Best Regards,

Susan M. Adams, County Administrator



COUNTY OF AMHERST



Department of Public Works

Telephone (434) 846-3324

Fax (434) 846-8710

Amherst County Public Works
715 Kentmoor Farm Road
P. O. Box 779
Madison Heights, Virginia 24572

March 16, 2020

Green Ridge Recycling and Disposal Facility
12230 Deerhill Road
Midlothian, VA 23112

Re: County of Amherst solid waste letter

Amherst County will be transitioning from operating our own solid waste landfill to a new transfer station by the end of 2021. At that time, we will need to haul our waste to a regional landfill. The new Green Ridge Recycling and Disposal Facility offers an opportunity for Amherst County to dispose of solid waste within the region. Last year alone, Amherst County received nearly 32,000 tons of solid waste at the County landfill.

Competition generally presents more options for counties like Amherst, and allows for the ability to lower costs to the county and its constituents. We look forward to the potential of using the Green Ridge Recycling and Disposal Facility when our transfer station opens.

Please contact me if you have any questions.

C. Brian Thacker
Director of Public Works



Billy W. Martin, Sr.
Chair

Donald M. "Mac" Scothorn
Vice-Chairman

Richard G. Bailey DMV
Steve P. Clinton
I. Ray Sloan

Office of the Administrator

57 South Center Drive
Daleville, Virginia 24083
December 10, 2019

Virginia DEQ
Richmond, Virginia

To whom it concerns,

I write this letter in support of the Green Ridge project in Cumberland County. The project is the result of years of planning with a vision for the future from the leadership of County Waste and should be allowed to move forward as planned for the benefit of all involved.

County Waste entered into a management agreement with Botetourt County to operate and close the County Landfill. County Waste has been a fabulous partner in this process and I know their leadership can own/operate the Green Ridge project. They have the knowledge, history and resources to fully develop the state of the art facility and bring additional prosperity to Cumberland County. The multiplied benefits of County Waste paying taxes, operating a landfill in the locality and the locality being paid on a per ton basis, is a great deal for the locality. We also feel certain that the Cumberland operation will assist Botetourt (and other localities) meet future waste disposal needs and will support the Transfer Station in Botetourt.

Landfills are complicated and it takes a firm like County Waste to tackle the project with a professional plan of action to make it work.

If the work in Botetourt County is any indication of the work that will take place in Cumberland, the DEQ, Cumberland County and the citizens of the community will be pleased. I would personally be happy to provide further details of the positive relationship Botetourt County has with County Waste if needed.

(540) 928-2006
GLarrowe@BotetourtVA.gov
BotetourtVA.gov

Sincerely,

A handwritten signature in black ink that reads "Gary Larrowe". The signature is written in a cursive style with a large, stylized 'G' and 'L'.

Gary Larrowe
County Administrator
Botetourt County, Virginia



Chesterfield County, Virginia

Joseph P. Casey, Ph.D., County Administrator

9901 Lori Road – P.O. Box 40 – Chesterfield, VA 23832-0040

Phone: (804) 748-1211 – Fax: (804) 717-6297 – Internet: chesterfield.gov

BOARD OF SUPERVISORS

LESLIE A. T. HALEY, CHAIR

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STEPHEN A. ELSWICK, VICE CHAIR

Matoaca District

DOROTHY JAECKLE

Bermuda District

CHRISTOPHER M. WINSLOW

Clover Hill District

JAMES M. "Jim" HOLLAND

Dale District

December 3, 2019

Mr. Jerry Cifor
County Waste, Inc.
12230 Deergrove Road
Midlothian, VA 23112

Subject: Green Ridge Landfill Capacity Reserve – Chesterfield County

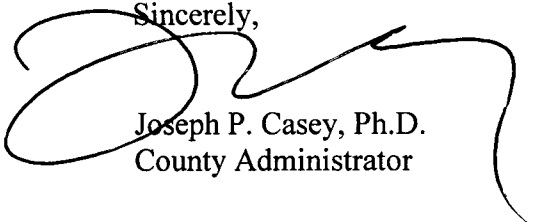
Dear Mr. Cifor:

Chesterfield County currently generates 35,000 tons of Municipal Solid Waste annually from our convenience centers in Chesterfield and related solid waste from County and School facilities. In addition, our citizens generate an additional 254,000 tons annually utilizing a variety of haulers, of which the Shoosmith Landfill is a large recipient of such solid waste. Both of these tonnage figures are expected to increase annually. As we approach the end of our MSW disposal contract in 2023, there will likely be fewer regional options for disposal due to facilities reaching capacity or closing; such as the Shoosmith Landfill. We understand that County Waste will also be fully utilizing this landfill until it reaches capacity in approximately five years.

The proposed Green Ridge Recycling and Disposal facility represents an opportunity to increase waste disposal capacity significantly in Central Virginia, and increase competition, thus providing a potential cost benefit to our county, its residents, and businesses in connection with their waste disposal needs.

We appreciate being considered as a potential future user of the Green Ridge Recycling and Disposal Facility and would like to preserve the option of disposal at that facility for future procurement. We also respect state and local approval processes for any such facility. Please contact county staff with any questions or clarifications regarding this request.

Sincerely,


Joseph P. Casey, Ph.D.
County Administrator

County of Dinwiddie

BOARD OF SUPERVISORS

DANIEL D. LEE
BRENDA EBRON-BONNER
HARRISON A. MOODY
DR. MARK E. MOORE
WILLIAM D. CHAVIS



COUNTY ADMINISTRATOR

W. KEVIN MASSENGILL

FOUNDED 1752

February 14, 2020

Mr. Jerry Cifor
Green Ridge Recycling and Disposal Facility, LLC
12230 Deergrove Road
Midlothian, Virginia 23112

Re: Landfill Capacity Reserve for Dinwiddie County

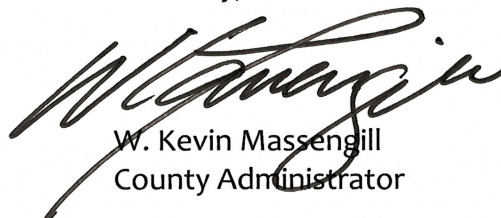
Dear Mr. Cifor,

Dinwiddie County is a growing community. Last year the County produced approximately 18,000 tons of municipal solid waste. We believe that number will continue to increase each year. The County is under contract for solid waste disposal until the end of 2023. At the time that we will need to procure solid waste disposal services, we recognize that the availability of options for disposal in our region will be reduced due to facilities reaching their capacity or otherwise closing.

As County Administrator, It is important that Dinwiddie County protect the option of disposal at the Green Ridge Recycling and Disposal Facility for future procurement. Therefore, I would like to express Dinwiddie County's support for the Green Ridge Recycling and Disposal Facility. It would be a tremendous asset regionally, as healthy competition is necessary to promote fair and equitable pricing.

As municipal solid waste production continues to grow in Dinwiddie County, we would appreciate your consideration as a potential future user of the Green Ridge Recycling and Disposal Facility. Should you have any questions regarding this request, please feel free to contact me directly at 804.469.4500, Ext. 2105, or kmassengill@Dinwiddieva.us.

Sincerely,



W. Kevin Massengill
County Administrator

BOARD OF SUPERVISORS

W. CANOVA PETERSON, CHAIRMAN
MECHANICSVILLE DISTRICT

SCOTT A. WYATT, VICE CHAIRMAN
COLD HARBOR DISTRICT

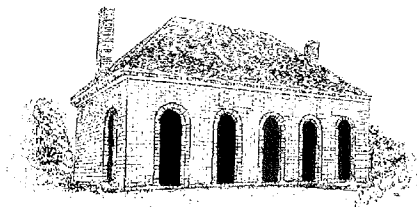
SEAN M. DAVIS,
Henry District

WAYNE T. HAZZARD
SOUTH ANNA DISTRICT

ANGELA KELLY-WIECEK
Chickahominy District

FAYE O. PRICHARD
ASHLAND DISTRICT

AUBREY M. STANLEY
BEAVERDAM DISTRICT



HANOVER COURTHOUSE

HANOVER COUNTY

ESTABLISHED IN 1720

COUNTY ADMINISTRATOR'S OFFICE

CECIL R. HARRIS, JR.
COUNTY ADMINISTRATOR

FRANK W. HARKSEN, JR.
DEPUTY COUNTY ADMINISTRATOR

KATHLEEN T. SEAY
DEPUTY COUNTY ADMINISTRATOR

JAMES P. TAYLOR
DEPUTY COUNTY ADMINISTRATOR

WWW.HANOVERCOUNTY.GOV

P.O. BOX 470, HANOVER, VA 23069
7516 COUNTY COMPLEX ROAD, HANOVER, VA 23069

PHONE: 804-365-6005
FAX: 804-365-6234

September 9, 2019

Green Ridge Recycling and Disposal Facility, LLC
Attn: Mr. Cifor
12230 Deerhill Road
Midlothian, Virginia 23112

Re: Landfill Capacity Reserve Letter – Hanover County

Dear Mr. Cifor:

Hanover County currently generates approximately 51,600 tons of Municipal Solid Waste annually. By 2023 we anticipate this amount to increase to approximately 55,850 tons. We are currently committed to a contract for disposal and hauling through 2023. Before that contract ends, we will need to re-procure services for both disposal and hauling. Regionally, there will likely be reduced options for disposal as we approach that important procurement due to facilities reaching capacity or otherwise closing and therefore an additional option is important.

Hanover County would like to preserve the option of disposal at the Green Ridge Recycling and Disposal Facility for future procurement. We believe adequate capacity will allow for healthy competition within the marketplace, which is important as we approach the 2023 horizon. This use of the Green Ridge Recycling and Disposal Facility is contingent upon the results of a successful bid through a competitive solicitation process in accordance with the Virginia Public Procurement Act.

We appreciate the opportunity to be considered as a potential future user of the Green Ridge Recycling and Disposal Facility. If there are any questions regarding this request, please let me know.

Sincerely,

Cecil R. Harris, Jr.
County Administrator

Chair

R. Clay Jackson

Vice-Chair

Charlotte Hoffman

BOARD MEMBERS

Amber Foster

Kevin McGhee

Carty Yowell



Madison County Board of Supervisors

Jack Hobbs

County Administrator

Sean D. Gregg

County Attorney

302 Thrift Road

P. O. Box 705

Madison, Virginia 22727

(540) 948-7500 (ph)

(540) 948-3843 (fax)

February 12, 2020

Greene Ridge Recycling & Disposal Facility, LLC

Attn: Mr. Coifor

12230 Deerhill Road

Midlothian, VA 23112

RE: Landfill Capacity Reserve Letter - Hanover County

Dear Mr. Cifor:

Madison County currently generates approximately 6,044 tons of Municipal Solid Waste annually. By 2024, we anticipate this amount to increase to approximately 8,881 tons. We are currently committed to a contract for disposal and hauling through 2024. Before that contract ends, we will need to re-procure services for both disposal and hauling. Regionally, there will likely be reduced options for disposal as we approach that important procurement due to facilities reaching capacity or otherwise closing and therefore, an additional option is important.

Madison County would like to preserve the option of disposal at the Green Ridge Recycling and Disposal Facility for future procurement. We believe adequate capacity will allow for healthy competition within the marketplace, which is important as we approach the 2024 horizon. This use of the Green Ridge Recycling and Disposal Facility is contingent upon the results of a successful bid through a competitive solicitation process in accordance with the Virginia Public Procurement Act.

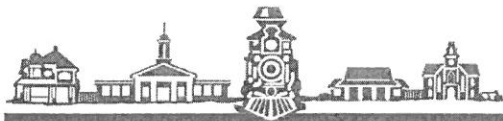
We appreciate the opportunity to be considered as a potential future user of the Green Ridge Recycling and Disposal Facility. If there are any questions regarding this request, please let me know.

Sincerely,

R. Clay Jackson

Chairman

A handwritten signature in black ink, appearing to read "R. Clay Jackson", written over the printed name and title.



Town of Ashland

Center of the Universe

101 THOMPSON STREET
P.O. BOX 1600
ASHLAND, VIRGINIA 23005-4600

TELEPHONE (804) 798-9219
FAX (804) 798-4892

December 2, 2019

STEVEN P.
TRIVETT
MAYOR

Green Ridge Recycling and Disposal Facility, LLC
ATTN: Mr. Jerry Cifor
12230 Deerhill Road
Midlothian, VA 23112

JOHN H.
HODGES
VICE-MAYOR

RE: Landfill Capacity Reserve Letter – Town of Ashland

GEORGE F.
SPAGNA, JR.
COUNCIL MEMBER

Dear Mr. Cifor,

KATHLEEN K.
ABBOTT
COUNCIL MEMBER

The Town of Ashland currently generates approximately 1800 tons of Municipal Solid waste annually. We anticipate the amount of solid waste generated annually to increase to approximately 2000 tons by 2024. Our current contract for disposal and hauling services runs through June of 2024. Before the current contract ends, we will need to go through the procurement process for both disposal and hauling services.

DANIEL W.
MCGRAW
COUNCIL MEMBER

The Town of Ashland would appreciate having the option of using the Green Ridge Recycling and Disposal Facility for our municipal solid waste disposal needs as we go through the competitive bid process. We do have a need regionally for more landfills in the future and having options should keep our pricing down.

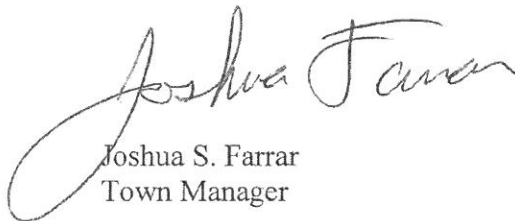
JOSHUA S.
FARRAR
TOWN MANAGER

ANDREA E.
ERARD
TOWN ATTORNEY

Therefore, we would appreciate the ability to be considered as a future user of the Green Ridge Recycling and Disposal Facility. If you have any questions regarding this request, please let me know.

MATTHEW G.
REYNAL
CLERK OF COUNCIL

Respectfully,



Joshua S. Farrar
Town Manager



CITY OF COLONIAL HEIGHTS

OFFICE OF THE CITY MANAGER

Douglas E. Smith
City Manager

City Hall • 201 James Avenue • P.O. Box 3401
Colonial Heights, Virginia 23834

January 30, 2020

Mr. Jay Zook
County Waste
12230 Deerhill Road
Midlothian, Virginia 23112

RE: Green Ridge Recycling and Disposal Facility

Dear Mr. Zook:

On behalf of the City of Colonial Heights, please accept this letter regarding the proposed Green Ridge Recycling and Disposal Facility.

The City of Colonial Heights is a participating member of the Central Virginia Waste Management Agency (CVWMA), and our municipal solid waste collection and disposal operations are provided through CVWMA contracts. Additional disposal options can help foster competition, and the City of Colonial Heights would like to retain the ability to have municipal solid waste from our City delivered to the Green Ridge Landfill. However, the City cannot at this time enter into a contract that stipulates or guarantees delivery or reservation of landfill capacity, until such time as deemed necessary and procurement is done in accordance with the Virginia Public Procurement Act.

If the City can provide any further information, please let me know.

Sincerely,

Douglas E. Smith
City Manager



CENTRAL VIRGINIA
WASTE MANAGEMENT AUTHORITY

2100 West Laburnum Avenue, Suite 105, Richmond, Virginia 23227 • 804/359-8413 • Fax 804/359-8421 • www.cvwma.com

June 28, 2019

Jerry Cifor
Green Ridge Recycling and Disposal Facility, LLC
12230 Deerhill Road
Midlothian, VA 23112

RE: Central Virginia Waste Management Authority (CVWMA)
Landfill Capacity Reserve Letter for Green Ridge Recycling and
Disposal Facility, LLC

Dear Mr. Cifor:

On behalf of the thirteen member jurisdictions of the CVWMA (Counties of Charles City, Chesterfield, Goochland, Hanover, Henrico, New Kent, Powhatan and Prince George, the Town of Ashland and the Cities of Colonial Heights, Hopewell, Petersburg and Richmond), please accept this letter as the response to your letters of May 1, 2019 to CVWMA member localities regarding the opportunity for CVWMA member jurisdictions to reserve disposal capacity in the proposed Green Ridge Recycling and Disposal Facility, LLC (Green Ridge).

CVWMA is in the process of updating the regional Solid Waste Management Plant (SWMP), and as a part of that process is evaluating its solid waste disposal needs for the next 20 years. While currently and for the foreseeable future there is adequate landfill airspace to accommodate our disposal needs in the region for the next twenty years, should the Green Ridge Landfill obtain a solid waste permit to operate from the Commonwealth of Virginia, jurisdictions of the CVWMA may need capacity in the future and would like to retain the ability to deliver municipal solid waste to the Green Ridge Landfill. CVWMA or member localities cannot at this time enter into a contract that stipulates or guarantees delivery or reservation of landfill capacity, until such time as deemed necessary and is procured in accordance with the Virginia Public Procurement Act.

One jurisdiction of the CVWMA, the County of Chesterfield, would like to specifically note that they generate approximately 35,000 tons of solid waste annually that could be delivered to the Green Ridge landfill at some point in the future. This is not a guarantee of tonnage and would require that a procurement be completed before a formal commitment could be made to Green Ridge Landfill.

If you have any questions regarding this letter, please do not hesitate to contact me at 804-612-0552.

Sincerely,

Kimberly A. Hynes
Executive Director





Rappahannock Regional Solid Waste Management Board

489 Eskimo Hill Road • Stafford, Virginia 22554 • 540-658-5279 • FAX 540-658-4523

December 6, 2019

County Waste Green Ridge Recycling and Disposal Facility
Attn: Jerry Cifor
12230 Deergrove Rd.
Midlothian VA 23112

The Rappahannock Regional Landfill (R-Board) is a regional body that serves the waste management needs for the City of Fredericksburg and Stafford County. Our main focus is in landfilling and moving recyclables to processors.

County Waste is a customer to our landfill and provides waste hauling and recycling services for the commercial businesses and residents of Fredericksburg and Stafford County. They have always been a good environmental steward to our service area and responsive to all service requests. They currently bring in over 4,500 tons per month to our landfill and have always been in good standing with payments.

We have worked with them on community outreach projects such as our Earth Day events which will draw thousands of people each year. They assist with free waste and recycling collection. They also do activities for community events.

They run a transfer station for waste and recycling nearby in Spotsylvania. This has been a valuable resource for the area.

In our experience working with them we feel they are a reliable entity in our waste management community and hope they will continue to provide service to our region.

Respectfully,

Joe Buchanan
R-Board Director



COUNTY OF BEDFORD, VIRGINIA

County Administration Building

122 East Main Street, Suite 202

Bedford, Virginia 24523

Tel: (540) 586.7601

ROBERT HISS

COUNTY ADMINISTRATOR

OFFICE OF THE COUNTY ADMINISTRATOR

April 22, 2020

Jerry Cifor
County Waste, Inc.
12230 Deergrove Rd.
Midlothian, VA 23112

RE: Support for the Green Ridge Disposal and Recycling Facility

Dear Mr. Cifor:

On behalf of Bedford County, I am writing in support of the Green Ridge project in Cumberland County. Bedford County currently operates its own permitted municipal solid waste landfill that is quickly nearing its capacity. The County currently disposes of nearly 50,000 tons per year and will need options to dispose of this waste in the future. Since other affordable and convenient alternatives are in short supply, the Green Ridge facility represents an important option for Bedford County as we strive to meet our future solid waste disposal needs. In addition, this proposed facility represents an opportunity to increase waste disposal capacity significantly in Central Virginia, and increase competition, thus providing a potential cost benefit to our county, its residents, and businesses in connection with their waste disposal needs.

We appreciate the opportunity to be considered as a potential future user of the Green Ridge facility. In conclusion, Bedford County strongly supports your company's request for a DEQ permit to construct and operate a municipal solid waste landfill in Cumberland County.

Sincerely,

A handwritten signature in blue ink, appearing to read "Robert Hiss".

Robert Hiss
County Administrator

COUNTY OF PRINCE GEORGE, VIRGINIA

Percy C. Ashcraft
County Administrator
Phone: (804) 722-8600
Facsimile: (804) 732-3604



BOARD OF SUPERVISORS

Floyd M. Brown, Jr.
Alan R. Carmichael
Donald R. Hunter
Marlene J. Waymack
T. J. Webb

April 20, 2020

Mr. Jay Zook
County Waste, Inc.
12230 Deerhill Road
Midlothian, VA 23112

Re: Green Ridge Recycling and Disposal Facility Permit Application

Dear Mr. Zook:

The County of Prince George currently generates approximately 1,916 tons of municipal solid waste annually. We anticipate the amount of solid waste generated by our County will continue to increase annually. Our current contract for disposal and hauling services runs through January 10, 2022. Before the current contracts ends, we will need to go through the procurement process for both the operation of our transfer station and for hauling services.

The County would appreciate having the option of using the Green Ridge Recycling and Disposal Facility for municipal solid waste disposal needs as we go through the competitive bid process. We do have a need regionally for more landfills in the future and having options for competitive bids keeps pricing down for our citizens.

We appreciate being considered as a potential future user of the Green Ridge Recycling and Disposal Facility and would like to preserve the option of disposal at that facility for future procurement. We also respect state and local approval processes for any such facility, and will follow the permitting process for your proposed facility as it moves forward.

Sincerely,


Percy C. Ashcraft
County Administrator

ATTACHMENT PTA-XX - AIRPORT PROXIMITY AND AGENCY COORDINATION

Per Submission Instruction 1, the applicant is to provide copies of the notification sent in accordance with 9 VAC 20-81-120.1.2 concerning the proposed facility's proximity to the airport and correspondence received from the affected airport, local aviation authority, and the FAA in response.

The Part A Application was originally submitted to DEQ on January 22, 2020. It was reviewed by DEQ and Technical Review No. 1 (TR 1) issued on April 8, 2021. No comments were received on Attachment PTA-XX under TR 1.

Subsequently, DEQ issued Technical Review No. 2 (TR 2) on June 16, 2022 with a supplement to TR 2 issued on October 25, 2022. Again, no comments specific to this attachment were received.

On May 12, 2023, a draft TR 2 response addressing updates to the Part A documents was submitted by TRC to DEQ for review and comment. Comments were received from DEQ via email on June 29, 2023. No comments were received on this attachment.

The information provided below, and attachments were submitted with the original Part A application.

Distance

A Regional Map (**Figure 3, PTA Attachment IX**) with 1-mile, 3-mile, and 5-mile radii lines showing the locations of airports has been developed. As shown on the Regional Map, there are no airports located inside the 5-mile radius of the Green Ridge facility. The nearest airport, Plainview Airport (VA94), is located approximately 13 miles from the Facility.

Public Use

In order to determine the nearest public-use airport, DAA contacted the Virginia Department of Aviation. In a response letter (dated May 6, 2019), Mr. S. Scott Denny, Senior Aviation Planner confirmed that the nearest airport (Plainview) is not a public-use airport. He stated, "*The closest public-use airport is Farmville Regional Airport which is located approximately 20+/- miles southwest of the proposed landfill site*". The letter of inquiry and Virginia Department of Aviation response letter are included in **PTA Attachment XX**.

Increased Bird Hazard

Not applicable.

Estimation of Likelihood of Increased Risk

Not applicable.

As shown on the Regional Map, the Facility boundary is not located within 10,000 feet of any airport runway end used by turbojet aircraft, or within 5,000 feet of any airport runway end used by only piston-type aircraft. Therefore, in accordance with §9 VAC 20-81-120.1.2, it is not required to demonstrate that the units are designed and operated so that the Facility does not pose a bird hazard.

The following is a list of documents that are associated with this section:

- Letter (email) of Inquiry for Nearest Public-Use Airport
- Virginia Department of Aviation Response Letter

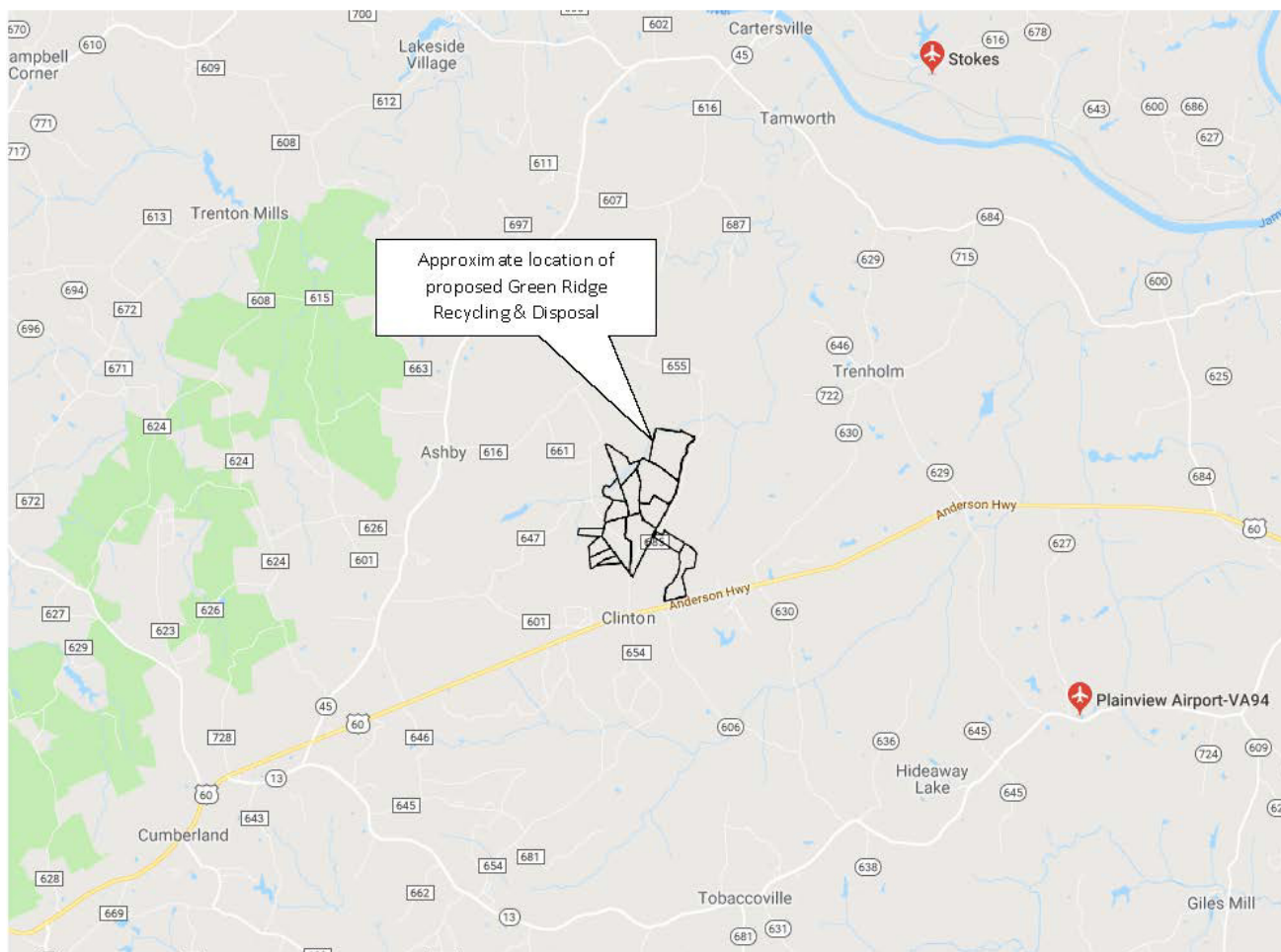
Barbara Hadley

From: Barbara Hadley
Sent: Thursday, May 2, 2019 12:31 PM
To: director@doav.virginia.gov
Subject: Landfill Siting - Cumberland County, VA

Good afternoon,

We are currently preparing a Part A Permit Application for a proposed new landfill (Green Ridge Recycling & Disposal) in Cumberland County, Virginia. As part of that process, we must establish that there are no public-use airports within a 3-mile radius of our site.

The nearest airport (to our knowledge) is the Plainview Airport (VA94), located on Old Buckingham Road in Cumberland (see map below). While it is located beyond the 3-mile perimeter, we still need to include in our application verification that it is not a public-use airport. Therefore, I am requesting a letter of determination from your offices, verifying that this is not a public-use airport.



If you have any questions or need further details, please do not hesitate to contact me.

Thank you,

Barbara H. Hadley

Staff Project Administrator

Draper Aden Associates

Engineering • Surveying • Environmental Services

Lasting Positive Impact™

Phone: 804.264.2228 • Direct Line: 804.237.1807

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COMMONWEALTH of VIRGINIA

Mark K. Flynn
Director

Department of Aviation
5702 Gulfstream Road
Richmond, Virginia 23250-2422

V/TDD • (804) 236-3624
FAX • (804) 236-3635

May 6, 2019

Ms. Barbara Hadley, Project Administrator
Draper Aden Associates
1030 Wilmer Avenue, Suite 100
Richmond, Virginia 23227

RE: Proposed Cumberland County Landfill, Public-Use Airport Proximity

Dear Ms. Hadley:

The Virginia Department of Aviation received your e-mail dated May 6, 2019. Your e-mail referenced a proposed landfill in Cumberland County and asked if the nearest airport, Plainview Airport (VA94), was a public-use airport. The Plainview Airport is located approximately 13+/- miles from the site you provided in your e-mail not a public a public-use airport.

The closest public-use airport is Farmville Regional Airport which is located approximately 20+/- miles southwest of the proposed landfill site.

Please do not hesitate to contact me at (804) 236-3638 if you have any questions regarding this matter.

Sincerely,

A handwritten signature in black ink, appearing to read "S. Scott Denny", written over a horizontal line.

S. Scott Denny
Senior Aviation Planner
Virginia Department of Aviation

ATTACHMENT PTA-XXI - FEMA FLOOD INSURANCE RATE MAP

In accordance with §9 VAC 20-81-120.A, owners or operators of all sanitary landfills located in the 100-year floodplains shall demonstrate that the site will not restrict the flow of the 100-year flood, reduce the temporary water storage capacity of the floodplain, or result in washout of solid waste so as to pose a hazard to human health and the environment. And pursuant to §10.-1408.4.B.1, no new municipal solid waste landfill shall be constructed in a 100-year floodplain.

To evaluate the applicability of the requirements of §9 VAC 20-80-250.A.2, the waste management boundary of the proposed site was compared with the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) for Cumberland County, Virginia. Based on information from the FEMA FIRM, no portion of the waste management boundary is located within the 100-year floodplain. See Near Vicinity Map (**PTA-IX Figure 2A**) relative to this.

The Part A Application was originally submitted to DEQ on January 22, 2020. It was reviewed by DEQ and Technical Review No. 1 (TR 1) issued on April 8, 2021. TR 1 had two comments relating to FEMA. The response to these comments was provided on October 1, 2021. The comments and responses are provided below:

6.) *It appears that the proposed waste management boundary depicted on the Near Vicinity Map encroaches slightly on delineated wetlands and the FEMA 1% chance annual floodplain along Muddy Creek. Please clarify or revise the proposed waste management boundary to avoid the wetlands and floodplain.*

Response: Mapping was updated under TR 1 to address this.

7.) *The Department understands that the FEMA 1% chance annual floodplain is currently being revised for this area. Please coordinate with FEMA and include the updated FEMA maps in the Part A Permit Application.*

Response: "Contact was made with FEMA and data received and added to the drawings. See **LETTER ATTACHMENT 7, Figure LA-7**, entitled "Comparison of published FEMA flood plain against pending FEMA update" dated 9/24/21 as prepared by Draper Aden Associates which provides a comparative analysis of the published FEMA floodplain versus the pending update to the FEMA floodplain data. The Near Vicinity Map has been revised to incorporate the pending FEMA update information. It should be noted that this information is not available to the public and has not been formally published.

Thus, we have identified it as "in progress" or "pending". The information was generally similar to the original floodplain information along Muddy Creek, but significantly different along Maple Swamp Creek. However, none of the pending updates impact the Waste Management Boundary which was adjusted to the new FEMA information."

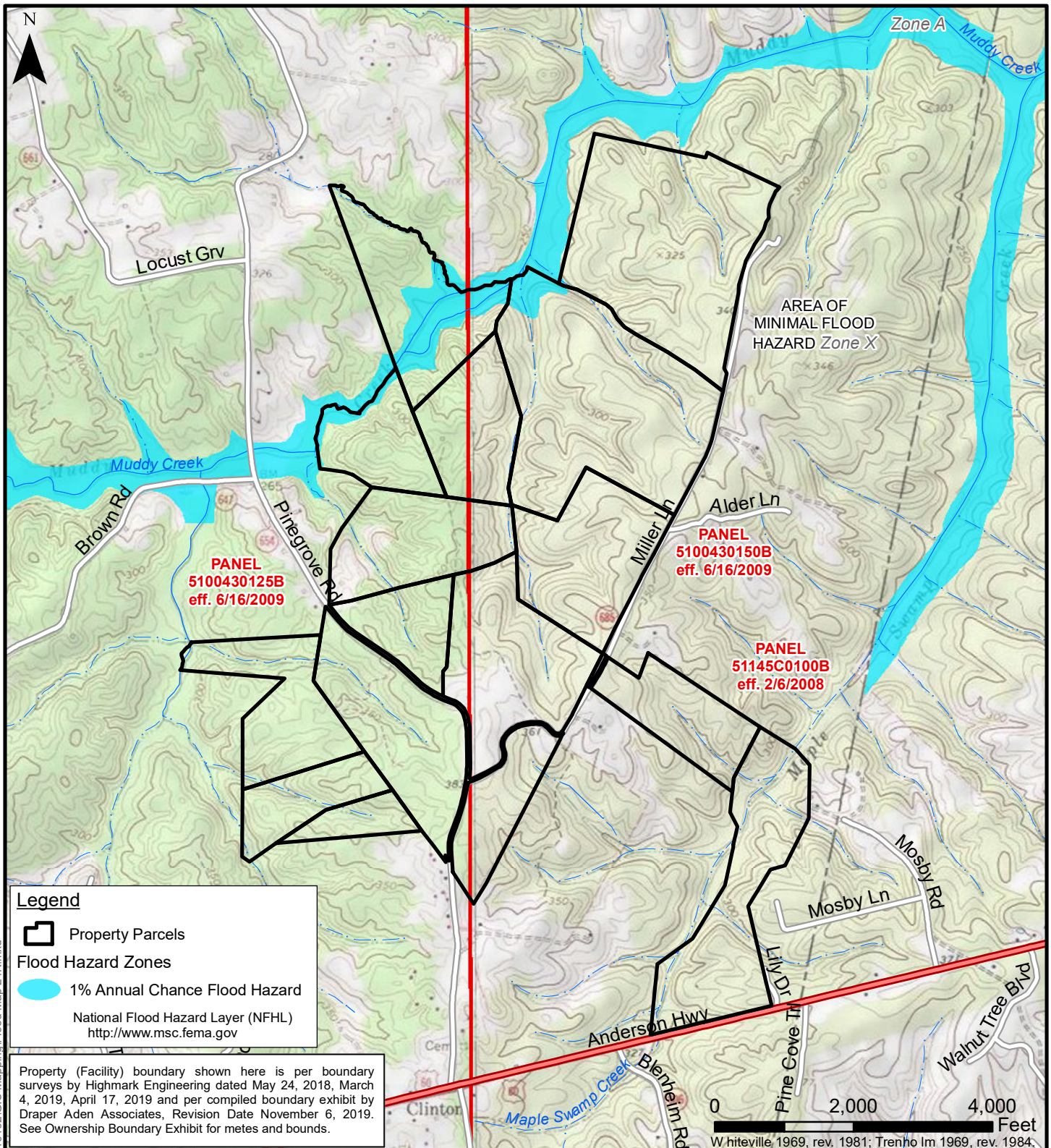
Subsequently, DEQ issued Technical Review No. 2 (TR 2) on June 16, 2022 with a supplement to TR 2 issued on October 25, 2022. No comments specific to this attachment were received.

On May 12, 2023, a draft TR 2 response addressing updates to the Part A documents was submitted by TRC to DEQ for review and comment. Comments were received from DEQ via email on June 29, 2023. No comments were received on this attachment.

Attachment PTA-XXI under this Final Part A Submission includes the following documents for reference:

- Part A – Figure XXI-1 – Flood Map – 24K (previously published data), dated 12/9/19.
- Part A – Figure XXI-2 – Flood Map – 80K (previously published data), dated 12/9/19.
- TR 1 – Figure LA-7 - Flood map comparison (using additional FEMA information), dated 9/24/21.

Note that all mapping provided to DEQ in this Final Part A Submission utilizes the TR 1 FEMA information.



FEMA Flood Insurance Rate Map

Notice of Intent - Part A

Green Ridge Recycling
and Disposal Facility
Cumberland County, Virginia

SCALE: 1" = 2000'

PROJECT: 18020117-030102



Draper Aden Associates

Engineering ♦ Surveying ♦ Environmental Services

1030 Wilmer Avenue, Suite 100
Richmond, VA 23227
804-264-2228 Fax: 804-264-8773

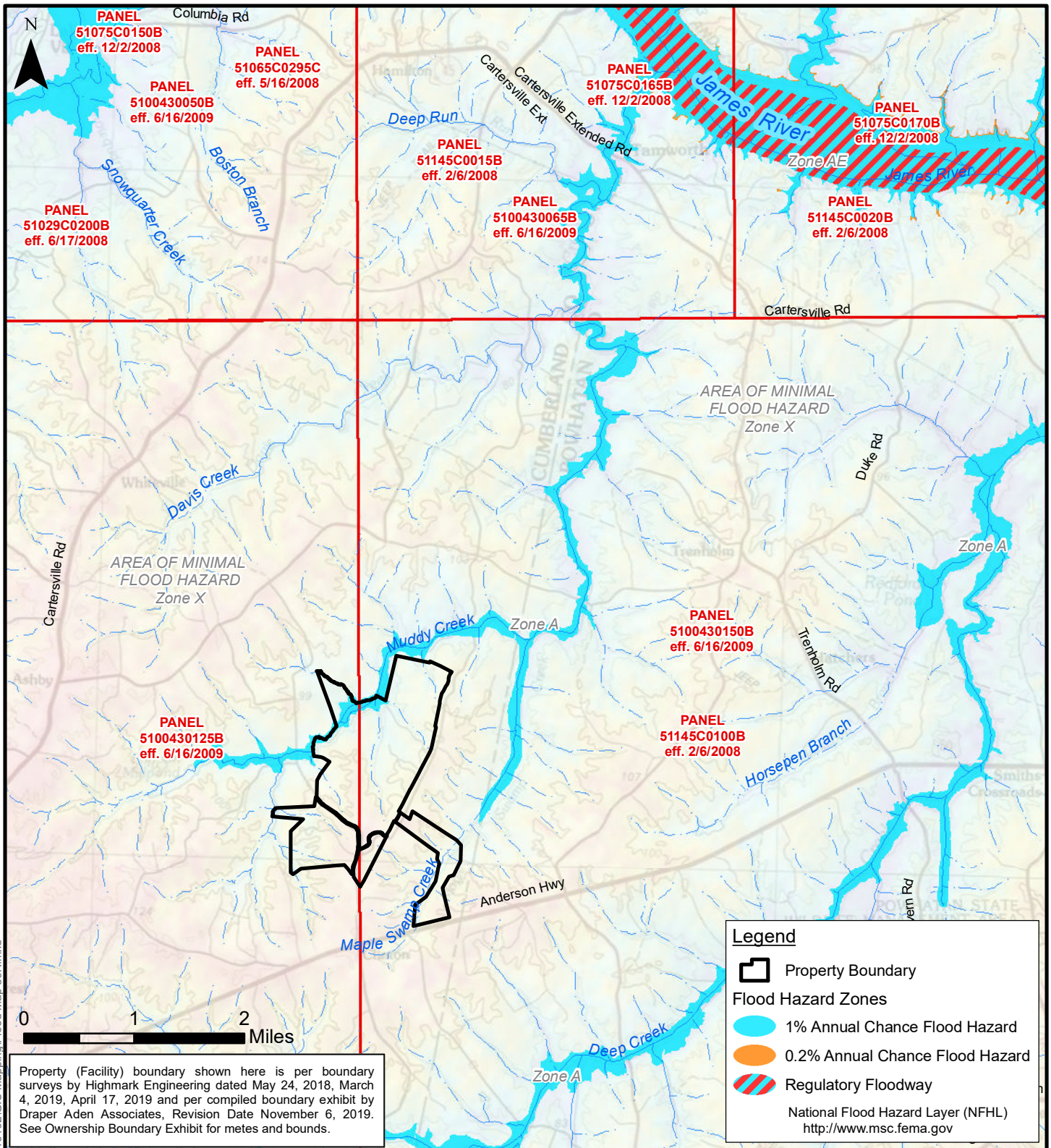
Blacksburg, VA
Charlottesville, VA
Hampton Roads, VA

Raleigh, NC
Fayetteville, NC
Northern Virginia

DESIGNED: LPK
DRAWN: SMF
CHECKED: KEB
DATE: 12-09-19

FIGURE

XXI-1



FEMA Flood Insurance Rate Map

Notice of Intent - Part A

Green Ridge Recycling
and Disposal Facility
Cumberland County, Virginia

SCALE: 1:80,000

PROJECT: 18020117-030102



Draper Aden Associates

Engineering ♦ Surveying ♦ Environmental Services

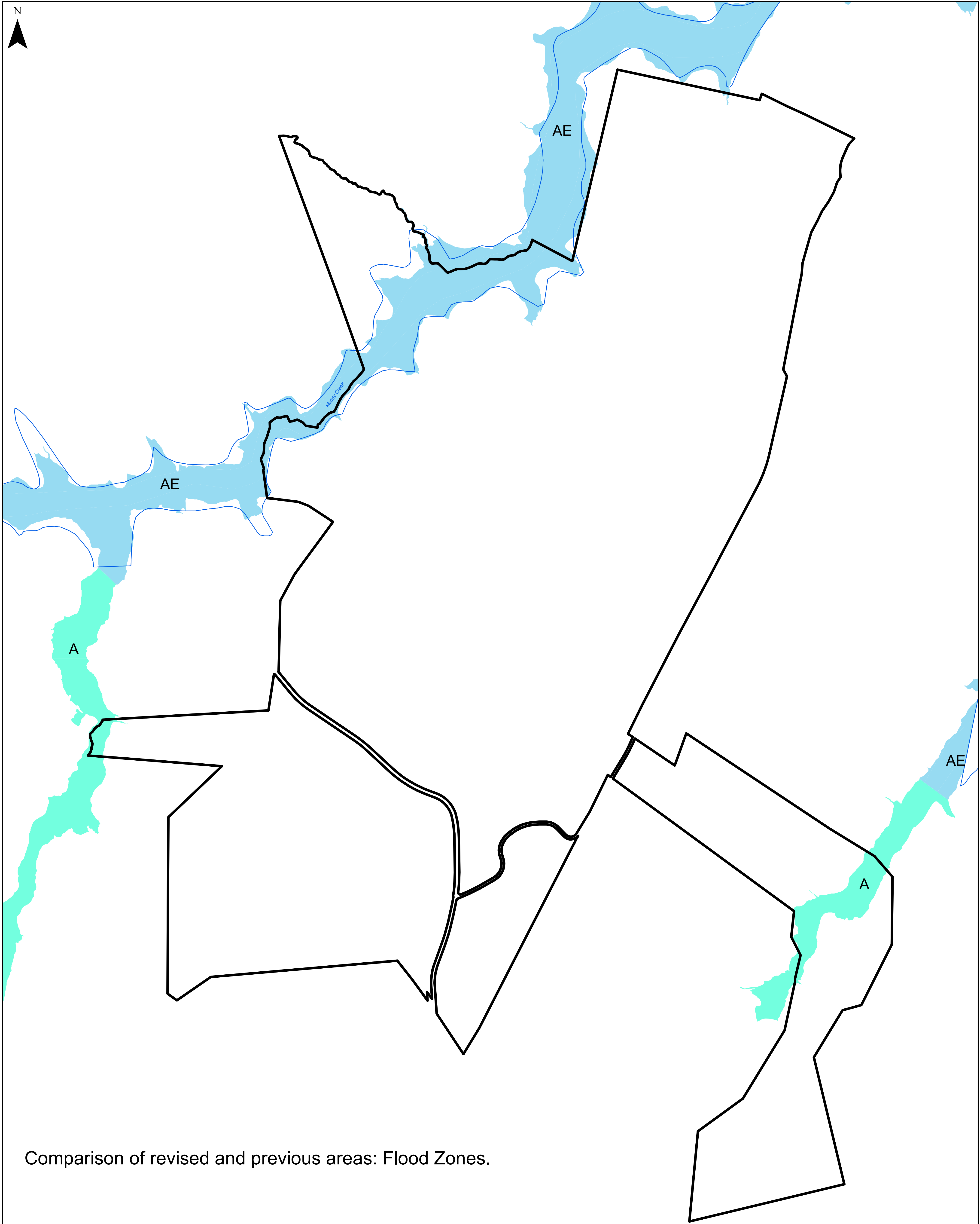
1030 Wilmer Avenue, Suite 100
Richmond, VA 23227
804-264-2228 Fax: 804-264-8773

Blacksburg, VA
Charlottesville, VA
Hampton Roads, VA

Raleigh, NC
Fayetteville, NC
Northern Virginia

DESIGNED: LPK
DRAWN: SMF
CHECKED: KEB
DATE: 12-09-19

FIGURE
XXI-2



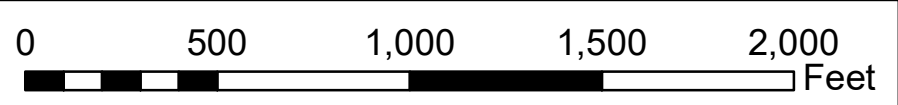
FOR INFORMATION PURPOSES ONLY.
SEE OTHER DOCUMENTATION PROVIDED FOR DETAILED INFORMATION.

Current Version	Previous Version
1% Annual Chance Flood Hazard (DEQ: FEMA work in progress)	1% Annual Chance Flood Hazard (FEMA Published, Zone A only)
<div><div></div>Flood Zone: A</div>	<div><div></div>1% Annual Chance Flood Hazard (FEMA Published, Zone A only)</div>
<div><div></div>Flood Zone: AE</div>	

The flood plain representation is a FEMA work-in-progress dataset provided by Virginia DEQ on 4/27/21 specifically for use in this project. It appears to be from AECOM. This representation could not be found in FEMA's Effective, Draft, Preliminary, or Pending references on the fema.gov website as of 8/2/21. We would normally reference FEMA's effective or published version.

ZONE A - Area inundated by the Base Flood with no Base Flood Elevations determined.
ZONE AE - Area inundated by the Base Flood with Base Flood Elevations determined.

Property (Facility) boundary shown here is per boundary surveys by Highmark Engineering dated May 24, 2018, March 4, 2019, April 17, 2019 and per compiled boundary exhibit by Draper Aden Associates, Revision Date April 21, 2021. See Ownership Boundary Exhibit for metes and bounds.



DESIGNED BY:		<div><div><div></div><div><div></div><div><div>Draper Aden Associates</div><div>Engineering • Surveying • Environmental Services</div></div></div><div><div>2206 South Main Street Blacksburg, VA 24060 540-552-0444 Fax: 540-552-0291</div><div>Richmond, VA Charlottesville, VA Hampton Roads, VA</div><div>Raleigh, NC Fayetteville, NC Northern Virginia Virginia Beach, VA</div></div></div></div>
DRAWN BY: SMF		
CHECKED BY: LPK		
SCALE: 1" = 500'		
DATE: 09-24-21		
PROJECT NUMBER: 18020117-090102		
FIGURE: FIGURE: LA-7		
REVISIONS Response to TR-1, 8/31/21 Letter Attachment 7		
<div><div><div><div>Comparison Map</div><div>Green Ridge Recycling and Disposal Facility Cumberland Co., Virginia</div></div></div></div>		